



भारत का राजपत्र

The Gazette of India

प्राप्तिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं० 12] नई दिल्ली, शनिवार, मार्च 25, 1989 (चैत्र 4, 1911)

No. 12] NEW DELHI, SATURDAY, MARCH 25, 1989 (CHAITRA 4, 1911)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके।
 Separate paging is given to this Part in order that it may be filed as a separate compilation.

भाग III—खण्ड 2

[PART III—SECTION 2]

पेटेन्ट कार्यालय द्वारा जारी की गई पेटेन्टों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस

[Notifications and Notices issued by the Patent Office relating to Patents and Designs]

THE PATENT OFFICE

PATENTS AND DESIGNS

Calcutta, the 25th March 1989

ADDRESS AND JURISDICTION OF OFFICES OF
THE PATENT OFFICE

The Patent Office has its Head Office at Calcutta and Branch Offices at Bombay, Delhi and Madras having territorial jurisdiction on a zonal basis as shown below :—

Patent Office Branch,
Todi Estates, III Floor, Lower Parel (West),
Bombay-400 013.

The States of Gujarat, Maharashtra, and Madhya Pradesh, and the Union Territories of Goa, Daman and Diu and Dadra and Nagar Haveli.

Telegraphic address "PATOFFICE".

Patent Office Branch,
Unit No. 401 to 405, 10 Floor,
Municipal Market Building,
Saraswati Marg, Karol Bagh,
New Delhi-110 005.

The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan and Uttar Pradesh and the Union Territories of Chandigarh and Delhi.

Telegraphic address "PATENTOFIC".

Patent Office Branch,
61, Wallajah Road,
Madras-600 002.

The States of Andhra Pradesh, Karnataka, Kerala, Tamilnadu and the Union Territories of Pondicherry, Laccadive, Minicoy and Aminidivi Islands.

Telegraphic address "PATENTOFIS".

Patent Office (Head Office),
"NIZAM PALACE", 2nd M. S. O. Building,
5th, 6th, and 7th Floor,
234/4, Acharya Jagadish Bose Road,
Calcutta-700 020.

Rest of India.

Telegraphic address "PATENTS".

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

Fees :—The fees may either be paid in cash or may be sent by Money Order or Postal Order, payable to the Controller at the appropriate Offices or by bank draft or cheque, payable to the Controller drawn on a scheduled bank at the place where the appropriate office is situated.

ALTERATION OF AN ENTRY IN THE REGISTER OF PATENT AGENTS UNDER RULE 103 OF THE PATENTS RULES, 1972

In pursuance of an application on Form 52 the address of Principal place of business of Shri R. Murali Dharan has been altered to :—

Assistant Professor,
National Law School of India University,
Central College Compound,
Bangalore-560 001.

APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE, 234/4, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-20

The dates shown in the crescent brackets are the dates claimed under Section 135, of the Patents Act, 1970.

The 15th February 1989

130/Cal/89. Siemens Aktiengesellschaft. Fast-acting clamping device for releasably connecting two components.

131/Cal/89. Phillips Petroleum Company. Resilient polypropylene fibers and preparation thereof.

132/Cal/89. Traqson Limited. Novel photoactive compounds, processes for their production and intermediates therefor. (convention dated 19-02-1988) U. K.

133/Cal/89. Veitscher Magnesitwerke-Aktion-Gesellschaft. Fire-resistant, gas permeable (permeous to gas). Stone rinsing device (sink).

134/Cal/89. Biswanath Ghosh. Improved double cylinder socks knitting machine, production of socks with double folded elastic top from double cylinder socks knitting machine and the process of manufacturing the same and the product produced from the said machine.

135/Cal/89. Westinghouse Electric Corporation. Improvements in or relating to more creep resistant turbine rotor, and procedure for repair welding of low alloy ferrous turbine components.

The 16th February 1989

136/Cal/89. Bernard Zimmern. An oil free rotating air compressor.

137/Cal/89. Upendra Kumar Das. Self operating device for stopping water waste caused by missing taps, including also Naba Charabaki Water Tap and alternatives.

138/Cal/89. Ashok Baran Guha and Tapan Banerjee. An electronically controlled automatic machine for preparing tea liquor, suitable for use by tea testers.

139/Cal/89. Tapan Banerjee. An electronically controlled dynamic weighing device.

The 17th February 1989

140/Cal/89. Emitec Gesellschaft fur Emissionstechnologie Mbh. Gearwheel.

The 20th February 1989

141/Cal/89. Armco Advanced materials Corporation. Ultra-rapid annealing of nonoriented electrical steel.

142/Cal/89. Armco Advanced materials Corporation. Method for treating electrical steel by electroetching and electrical steel having permanent domain refinement.

143/Cal/89. Armco advanced materials Corporation. Permanent domain refinement by aluminum deposition.

144/Cal/89. Armco advanced materials corporation. Ultra-rapid heat treatment of grain oriented electrical steel.

145/Cal/89. E. I. Du pont de nemours and company. Gas-phase fluorination process.

146/Cal/89. Santrade Ltd. Method and apparatus for producing pastilles.

147/Cal/89. Emitec Gesellschaft fur Emissionstechnologie Mbh. Assembled driveshaft.

148/Cal/89. Debreceni Mezogadasagi Gepgyarto Vallalat. Seed-dresser, in particular for dressing cereals, in particular rice, pea, oat etc.

149/Cal/89. Ralph habel hoyeck. Perpetual blind calendars series 2 (PBC2).

150/Cal/89. Veitscher Magnesitwerke-aktion-gesellschaft. Permeable element.

The 21st February 1989

151/Cal/89. Yokogawa electric corporation. Graphic display system.

APPLICATION FOR PATENTS FILED AT THE PATENT OFFICE, BRANCH, MUNICIPAL MARKET BUILDING, THIRD FLOOR, KAROL BAGH, NEW DELHI-110005

The 23rd January 1989

55/Del/89. M&T Chemicals Inc., "Epoxy-aromatic polysisloxane compositions".

56/Del/89. Mezhotraslevor Nauchno-Tekhnichesky Komplex "Mikrokhirurgia Glaza". Device for surgical treatment of astigmatism".

57/Del/89. Rohm and Haas Co., "Carbonaceous adsorbents from pyrolyzed polysulfonated polymers".

The 24th January 1989

58/Del/89. Jagdish Saran Gupta, "Sugar cane crusher".

59/Del/89. Oil & Natural Gas Commission. "Process for the preparation of sulpho-methylated lignite".

60/Del/89. Oil & Natural Gas Commission, Process for the preparation of organophilic clay".

61/Del/89. Oil & Natural Gas Commission, "Process for preparation of organophilic lignites".

62/Del/89. Oil & Natural Gas Commission, "Process for the preparation of lubricant".

63/Del/89. Oil & Natural Gas Commission, "Process for the preparation of sulphomethylated cutch".

64/Del/89. National Council for Cement & Building Materials, "A vertical shaft kiln".

65/Del/89. RAD/RED Laboratories Inc., "Radiation reduction filter for use in medical diagnosis" (Convention date 29-1-88) (Canada).

66/Del/89. Imperial Chemical Industries PLC., "Low energy fuse and method of manufacture". (Convention date 3-2-88) (U.K.).

67/Del/89. Pierre Gagnon and Pierre Laforest, "Push actuator".

The 25th January 1989

68/Del/89. GTG, Inc., "Process and apparatus for the production of heavier hydrocarbons from gaseous light hydrocarbons".

69/Del/89. The B. F. Goodrich Co., "Process for detoxifying a bottoms draw off from a high temperature chlorination reactor".

70/Del/89. Mallinckrodt, Inc., "Hydrolysis of activated olefinic ketones and aldehydes". (Convention date 26th January, 1988) (Canada).

71/Del/89. Colgate Palmolive Co., "Dispenser for the metered delivery of pasty products".

72/Del/89. Dynavac Gasellschaft Mit Beschränkter Haftung. "Leather treatment". (Convention date 6th February, 1988) (U.K.).

73/Del/89. Ranbaxy Laboratories Ltd., "A new process for the preparation of 1-cyclopropyl-6-fluoro-1, 4-dihydro-4-oxo-7 (1-piperazinyl) Quinoline-3-carboxylic acid".

The 27th January 1989

74/Del/89. Om Shiv Sharma, "Improved solar thermal and photo-electric systems".

75/Del/89. Steel Authority of India Ltd., "An apparatus for measuring wear of a roll or cylindrical body".

76/Del/89. The Procter & Gamble Co., "Amino-functional compounds as builder/dispersants in detergent compositions".

77/Del/89. The Devilbiss Co. Ltd., "Spray gun". (Convention date 3rd February, 1988) (U.K.).

78/Del/89. Mezhotraslevoi Nauchno Tekhnichesky Kompleks "Mikrokhirurgia Glaza", "Device for surgical treatment of ametropia".

79/Del/89. Boving Newton Chambers Ltd, "Butterfly valve blade". (Convention date 28th January, 1988) (U.K.).

80/Del/89. Warner-Lambert Co., "Polymeric materials made from destructured starch and at least one synthetic thermoplastic polymeric material." Convention date 3rd February, 1988) (U.K.).

**APPLICATIONS FOR PATENTS FILED IN THE
PATENT OFFICE BRANCH AT TODI ESTATES,
III RD FLOOR, SUNMILL COMPOUND, LOWER
PARROT (W), BOMBAY-13**

The 13th January 1989

24/Bom/89. Honey Bull Inc. Apparatus and method for a data processing system having a peer relationship among a plurality of central processing units.

The 31st January 1989

25/Bom/89. V. I. P. Industries Ltd. A dual action lock for use in a suitcase or briefcase and a suitcase or briefcase having the same.

The 1st February 1989

26/Bom/89. Shah Vinodray Nanchand. Ceiling fan with movable blades.

The 2nd February 1989

27/Bom/89. Paramount Sinters Pvt. Limited. A novel continuous electrical incinerator with sealed charging device.

**APPLICATIONS FOR PATENTS FILED AT THE
PATENT OFFICE BRANCH, 61, WALLAJAH
ROAD, MADRAS-600 002**

The 6th February 1989

94/Mas/89. O. M. Neelakantan. A programmable logic controller for a process plant.

95/Mas/89. U. Krishnakumar. Automation of railway signalling system.

96/Mas/89. Viswanathan Thiagarajan. Spillage, theft proof taps.

97/Mas/89. Foseco International Limited. Thermocouples.

98/Mas/89. Normalair-Garrett (Holdings) Limited. Sonobuoy Dispensers (February 15, 1988; United Kingdom).

The 7th February 1989

99/Mas/89. Kotapuri Ellezer. Automatic valve stopping water when the tap is removed from the pipe.

100/Mas/89. Improver Corporation. Depilatory device.

101/Mas/89. Battelle Memorial Institute. A method for the continuous coating of a filiform steel substrate by immersion of this substrate in a bath of molten coating metal.

The 8th February 1989

102/Mas/89. Inventio AG. Door drive device with locking mechanism for lifts.

103/Mas/89. Minnesota Mining and Manufacturing Company. Fluorine-containing polymers with pendant thioorgano groups.

The 9th February 1989

104/Mas/89. Lucas Industries Public Limited Company. Improvements in self-energising disc brakes. (February 4, 1985; United Kingdom).

105/Mas/89. Hoogovens Groep BV. Apparatus for sorting metal bars by length.

106/Mas/89. Compagnie Européenne Du Zirconium Cezus. Process and device for introducing zirconium tetrachloride, hafnium tetrachloride and mixtures thereof into a column for the continuous extractive distillation under pressure of said chlorides.

The 10th February 1989

107/Mas/89. Astra Research Centre India. Diagnosis of Plasmoidal Infactions.

108/Mas/89. Comalco Limited. Cast aluminium alloys. (February 10, 1988; Australia).

ALTERATION OF DATE

164482. (415/Del. 84). Ante-dated to 19th August, 1980.

164483 (576/Del/85) Ante-dated to 09th February, 1982.

164491. (182/Mas/85) Ante-dated to 19th November, 1981.

PATENTS SEALED

CALCUTTA

155952 162409 162821 162868 163282.

DELHI

159822.

BOMBAY

158189 163242 163252 163257 163260.

MADRAS

161763 162989 163012 163015 163016 163044.

AMENDMENTS PROCEEDINGS UNDER SECTION 57

Notice is hereby given that Hughes Aircraft Company, 200 North Sepulveda Boulevard, E 1 Segundo, California 90245, USA has/have made an application on form-29 under section 57 of The Patents Act, 1970 for amendment of specification of their application for Patent No. 162952 (8/Del/84) for Apparatus for enhancing Unage resolution. The amendments are by way of reflecting new address which is 7200 Hughes Terrace, PO Box 45066, Segundo, California, 90245. The application for amendment and the proposed amendments can be inspected free of charge at the Patent Office Branch, Unit No. 401 to 405, 3rd Floor, Municipal Market Building, Saraswati Marg, Karol Bagh, New Delhi-110005, or copies of the same can be had on payment of usual copying charges.

Any person interested in opposing the application for amendment may file a notice of opposition in form-30 within three months from the date of this notification at Patent Office Branch, Unit No. 401 to 405, 3rd Floor, Municipal Market Building, Saraswati Marg, Karol Bagh, New Delhi-110005. If the Written Statement of Opposition is not filed with the notice of opposition it shall be left within one month from the date of filing the said notice.

COMMERCIAL WORKING OF PATENTED INVENTIONS LIST NO. II CHEMICAL

The following patents in the field of Chemical Engineering Industry are not being commercially worked in India as admitted by patentees in the statements filed by them under section 146(2) of the Patents Act, 1970 in respect of calendar year 1987 generally on account of want of request for licences to work the patented invention. Persons who are interested to work the said patents commercially may contact the patentees for the grant of a licence for the purpose.

Patent No.	Date of Patent	Name and address of the Patentee	Title of the invention
1	2	3	4
146531	19-10-1976	Aluminium Pechiney, 28 Rue de Bonnel, 69003 Lyon, France.	Purification of solutions circulating in the Bayer cycle for the alkali treatment of Bauxites by a Barium compound.
152281	11-2-1980	Do.	Process for converting hydrargillite into Boehmite.
158125	14-2-1983	Do.	Process for purifying metals by segregation.
145378	4-5-1977	American Cyanamid Company, Wayne, New Jersey, U.S.A.	Novel method for dinitrosation of organic nitrosamines.
150908	20-9-1978	Do.	A process for preparing a melt spun acrylonitrile polymer fiber.
152486	19-6-1979	Do.	Melt-spinning acrylonitrile polymer fiber from low molecular weight polymer and acrylonitrile polymer fiber so prepared.
153347	11-3-1981	Do.	An improved process for the manufacture of alumina from alumina ores.
155352	24-5-1983	Do.	Process for the preparation of pyridyl and quinolyl imidazolinones.
157103	24-5-1983	Do.	Process for the preparation of 2-(5, 5-disubstituted-4-oxo (or thiono) 2-imidazolin-2-yl) nicotinic acid/3-Quinoxolinecarboxylic acid/Benzoic acid.
157235	13-3-1984	Do.	Novel process for the preparation of amino-nitriles useful for the preparation of herbicides.
158029	11-2-1983	Do.	An improved process for preparing a reinforced conductive component.
143438	15-1-1975	Ansalt Gemass, Vaduz, Liechtenstein.	Method for continuous hydrolysis of pentosane-containing material and apparatus for implementing the method.
143118	10-12-1975	Arbook, Inc. 2500 Arbook Boulevard, Arlington, Texas, U.S.A.	A disinfectant agent.
145251	27-5-1976	Asahi Glass Co. Ltd., No. 1-2 Marunouchi 2-Chome, Chiyoda-Ku, Tokyo, Japan.	Process for producing ammonium chloride.
158128	31-3-1983	Do.	An improved process for recovering ammonia from ammonium chloride.
143341	17-9-1975	Australian Fertilizers Limited, 213 Miller Street, North Sydney, New South Wales, Australia.	Production of granular ammonium sulphate.
156765	14-9-1982	Bata Limited 59, Wynfold Drive, Toronto Ontario, Canada M3C 1K3.	Fast-curing foamable composition based on ethylene terpolymers.
153648	13-1-1981	Battelle Development Corporation, 505 King Avenue, Columbus, Ohio 43201, U.S.A.	A method of producing a reaction gas having a low content of nitrogen oxides and sulfur dioxide from the combustion of hydrocarbons in a multisolid fluidized bed having a lower dense fluidized bed.

1	2	3	4
153197	27-11-1979	Bau-und Forschungsgesellschaft Thermoform AG Ryf 50, Murten/Fribourg, Switzerland.	Pulping of lignocellulose with aqueous methanol catalyst mixture.
156102	20-4-1983	Beecham Group Plc. Beecham House, Great West Road, Brentford, Middlesex, England.	A method for preparation of an oral hygiene compositions.
155360	8-11-1982	Behringwerke Aktiengesellschaft, D-3550 Marburg 1, F.R.G.	Process for preparing biologically active latex conjugates.
158222	13-8-1984	Biogen N.V. 15, Peter Maal, Willemstad, Curacao, Netherlands, Antilles.	Process for producing pharmaceutically acceptable compositions effective against Hepatitis B. Viral infections.
145307	4-5-1976	Biomechanics Limited, Smarden, Ashford, Kent, England.	A method of obtaining reduced quantity of waste materials from biodegradable waste materials.
157767	14-11-1983	Butto Krishna Banerjee, 18/B, Abinash Chandra Banerjee Lane, Calcutta-10, State of West Bengal, India.	A process for the manufacture of coke briquettes which are hard, moulded, weather resistant and smokeless.
151346	23-8-1978	Chloune Engineers Corp. Ltd., 2-5 Kasumigasaki 3-chome-Chiyoda-Ku, Tokyo, Japan.	Process for purifying aqueous solution of alkali metal halides for electrolysis.
148118	22-3-1978	Ciba-Geigy AG Klybeckstrasse 141, 4002 Basle, Switzerland.	Process for bleaching textiles.
151970	2-4-1979	Compagnie Universelle D.Acetylene Et.D, Electro Metallurgie, 6-rue-Pigalle 75009, Paris, France.	Improvement in or relating to a method for obtaining iron based alloy, allowing in particular their mechanical properties to be improved based alloys obtained by the said method.
148834	28-10-1975	Convair Investments Limited, Sassoon House Nassau, The Bahamas.	Water-in-oil emulsion containing finely divided coal.
151604	12-6-1979	Corning Glass Works of Houghton Park, New York, 14830, U.S.A.	Method of producing glass filaments.
149540	26-3-1979	CPC International Inc., International Plaza Englewood Cliffs, New Jersey 07632, U.S.A.	A process for producing an immobilised glucose isomerase.
151247	1-9-1979	Do.	A process for the production of a glucoamylase enzyme preparation.
151398	20-7-1979	Do.	A process for producing a glycoamylase enzyme preparation.
153390	19-10-1981	Do.	Improved process for the continuous preparation of crystallized alpha monohydrate dextrose from a dextrose containing liquor.
154879	21-3-1980	Davy McKee (London) 250 Euston Road, London NW1, 2PO, England.	Process for the production of a sulphur free Butene-1 rich stream.
155261	8-8-1980	Degussa AG., Frankfurt/Main 6450 Hannover, Postfach, F.R.G.	Silane/Filler preparations, a process for their production.
155262	8-8-1980	Do.	Vulcanisable rubber mixture based on halogen-free rubbers, a process for vulcanisation of these rubber mixtures.
155430	5-6-1982	Do.	Process for obtaining 3-cyano-pyridine.
155641	26-11-1981	Do.	A process for preparing improved animal feed by supplementing industrially produced mixed feed stock with methionine.
155674	10-9-1981	Do.	A process for the production of 2-amino-3-carboxy-amino-6-(p-fluoro-benzylamino)-pyridine-maleate and medicinal composition including same.
157353	24-6-1982	Do.	An improved process for preparing silicon nitride components having high and uniform structural strength.

1	2	3	4
152573	18-12-1980	Denki Kagaku Kogyo Kabushiki Kaisha, 4-1 Yuraku-chō, 1-chome, chiyoda-ku, Tokyo, Japan.	Improvement in or relating to a method for production of carbon black.
146578	15-7-1977	Dr. Beck & Co., AG, 2000 Hamburg 28, Grossmannstrasse 105, F.R.G.	Process for producing a directly tinnable wire.
147590	19-12-1977	Do.	A process for the preparation of an aqueous electrically insulated varnishes.
144410	7-8-1976	Dr. C. Etto & Comp. GmbH, 463, Bochum, West Germany.	A method for the production of coke using a battery of coke ovens with a regenerative change of draught.
152657	30-6-1980	Do.	A method of manufacture of coke.
155388	12-2-1981	Do.	A process for preparing quenched coke from hot coke and for simultaneously producing water gas by using sensible heat of hot gas.
152171	25-7-1981	Dulal Mukherjee C/o Mr. L.B. Mukerjee, C.I.T. Bldg. (Old), Block No. 7/B, Flat No. 32, Beliaghata, Calcutta-700 010, W.B.	A process for preparation of improved aluminium silicon base alloys.
143622	8-10-1975	E.I. Du Pont De Nemours & Co., Wilmington, Delaware, U.S.A.	Chloroalkali electrolysis cell employing ethylene diamine modified membrane.
144216	9-5-1975	Do.	An oriented filament of polyester and a method of making same.
150598	25-2-1980	Do.	Process for producing rutile TiO ₂ .
152693	11-12-1979	Do.	A method of producing an explosive composition of water-in-oil emulsion type.
153701	22-4-1981	Do.	Water removal in nitration of aromatic hydrocarbons.
154470	23-10-1980	Do.	Resin-bonded water-bearing explosive and a method for making the same.
154543	7-3-1981	Do.	Method of stabilizing the thickened or gelled structure of a water bearing explosives so prepared.
157596	9-8-1978	Do.	An inorganic groutable material for use in anchoring a bolt in a hole.
145355	7-5-1976	Eisenwerk Gesellschaft Maximilianshütte mbH 8458, Sulzbach-Rosenberg, West Germany.	Method and apparatus for continuous gasification of solid and/or fluid carbon containing and/or hydrocarbon containing substances in molten iron in a reaction vessel.
146362	7-5-1976	Do.	Method and apparatus for continuous gasification of solid and/or fluid carbon containing and/or hydrocarbon-containing substances in molten iron in a reaction vessel.
150145	4-5-1978	Do.	An improved process for the production of steel in a convertor using higher proportions of solid scrap.
157298	24-5-1982	Electrolytic Zinc Company of Australasia Ltd., 390 Lonsdale Street, Melbourne, In the state of Victoria, Commonwealth of Australia.	An improved process for solution control in an electrolytic zinc plant circuit.
157458	7-9-1981	Energy Conversion Devices, Inc. 1675 West Maple Road, Troy, Michigan 48084, U.S.A.	A method for making an improved photo-responsive amorphous silicon based alloy.
157494	7-9-1981	Do.	A method of making an improved photo-responsive silicon-based alloy.
157589	7-9-1981	Do.	Process for producing optimized photoresponsive amorphous semiconductor for devices.

1	2	3	4
157667	7-9-1981	Energy Conservation Devices, Inc. 1675 West Maple Road, Troy, Michigan 48084, U.S.A.	A method of making an photo responsive silicon based alloy.
144819	26-12-1975	Ethicon Inc. Sommerville, New Jersey, U.S.A.	An improved surgical suture and method of preparing same.
151798	30-10-1979	Do.	Process for preparing elastomeric surgical sutures comprising segmented copolyether/esters.
157409	10-11-1981	Do.	A process for preparing drawn and highly oriented thermoplastic surgical filaments.
157660	22-7-1982	Do.	Process for producing radiation sterilizable polymeric materials.
158149	24-1-1984	Do.	A process for preparing an paste for haemostasis and temporary bridging of defects in cases of bone trauma.
157379	17-3-1982	Extracorporeal Medical Specialities, Inc. Royal & Ross Roads, King of Prussia, Pennsylvania 19406, U.S.A.	A method for treating fixed natural tissue for preventing calcification and deterioration of properties on implantation.
149321	17-10-1978	Fagersta Aktiebolag Fack S-773 01 Fagersta, Sweden.	A method for manufacturing a low-alloy highspeed steel.
145966	7-7-1977	Fertilizer Corporation of India Ltd., 55 Madhuban Nehru place, New Delhi-110024, India.	Process of obtaining sodium tripolyphosphate.
147941	23-1-1978	Do.	Process for the production of potassium nitrate.
158296	23-4-1982	Festo-Maschinenfabrik Gottlieb Stoll, Ulmer strasse 48, 7300 Esslingen, F.R.G.	A spool valve.
156897	2-7-1983	F. Hoffmann-La Roche & Co., AG. 124-184 Grenzacherstrasse, Basle, Switzerland.	A process for the manufacture of 2-oxopyrrolidine derivative.
147255	5-10-1977	FMC Corporation 2000 Market Street, Philadelphia, Pennsylvania 19103, U.S.A.	A process for obtaining hydrogen sulfide free steam from geothermal steam or industrial gas streams containing hydrogen sulfide and water vapor.
152973	28-5-1980	Flowcon or Painontie 25, 37630 Valkeakoski 3, Finland.	A binder (cement) and process for producing the same.
156652	9-7-1981	Formica Corporation Berdan Avenue, Wayne, State of New Jersey, U.S.A.	Adhesive Compositions.
157741	25-1-1982	FMC Corporation 2000 Market Street, Philadelphia, Pennsylvania 19103, U.S.A.	A process for the purification of spent steam in a geothermal power plant.
153580	14-1-1981	Gas Sweetener 7777 Bonhomme Avenue, Clayton, St. Louis, County, Missouri, U.S.A.	Scavenging hydrogen sulfide from Hydrocarbon gases.
150013	14-6-1978	General Electric Company 1, Rover Road, Schenectady 5, New York, U.S.A.	Process for making a sintered polycrystalline cubic boron nitride compact.
150647	19-9-1978	Do.	A process for preparing poly crystalline diamond body.
150315	13-10-1978	Do.	Process for preparing an integral composite of a polycrystalline diamond body and silicon carbide or siliconnitride substrate.
152702	27-12-1979	Do.	A process for producing an integral composite of polycrystalline diamond and/or cubic boron nitride body phase and substrate phase.
152876	2-5-1980	Do.	Production of cubic boron nitride from powdered hexagonal boron nitride.
153075	9-4-1980	Do.	Process for preparing a polycrystalline diamond body.

1	2	3	4
153720	22-7-1980	General Electric Company 1, Rover Road' Schenectady 5, New York, U.S.A.	An improved process for preparing a compact.
157518	30-8-1982	Do.	Polycrystalline diamond compact and an improved process for making the same.
157594	27-5-1982	Do.	Improved process for making diamond and cubic boron nitride compacts.
157760	27-1-1982	Do.	Process for improving the plating characteristics of Boron rich Cubic Boron nitride.
157316	23-10-1982	Hendrikus Van Berk H. Govertkade 3, 2628 EA Delft, the Netherlands.	Apparatus for suctioning submerged bottom material.
151252	28-6-1978	Henkel Kommanditgesellschaft Auf Aktien, Henkelstrasse 67, 4000 Dusseldorf-Holthasen, F.R.G.	Method for producing leather.
140836	21-2-1975	Hoechst Ag. 6230, Frankfurt/Main 80, W.G.	Dyestuff composition for the dyeing or printing of cellulose fibre materials.
143191	17-10-1974	Do.	Process for the preparation of new water soluble Azo dyestuffs.
143315	18-3-1975	Do.	Process for the preparation of new water soluble naphthyl monoazo pyrazolone dyestuffs.
143335	28-1-1975	Do.	Process for the preparation of pure aromatic O-hydroxy-carboxylic acid Aryl Amides.
143365	18-6-1975	Do.	Process for the preparation of water soluble monoozo dyestuffs.
143374	24-10-1975	Do.	Process for the reactive dyeing and printings of fibrous materials containing hydroxy groups.
143734	2-4-1975	Do.	Liquid aqueous dyeing preparation of reactive dyes.
143889	11-11-1975	Do.	A process for the manufacture of polymer mixture for making intermediate sheeting for laminated glass.
143982	17-11-1975	Do.	Liquid preparation of reactive dyestuffs.
144220	27-4-1976	Do.	Process for the preparation of 5-acetoacetyl 2, 5-dimethoxy-4-chloroanilide.
144344	28-1-1976	Do.	An improved process for the preparation of water soluble azo dyestuffs.
144119	3-9-1975	Do.	A composition of matter comprising of dyestuff pigment and optical brightener and condensation product of alkyl naphthalene sulphonate acid and formaldehyde.
144389	28-1-1976	Do.	A process for the preparation of liquid aqueous compositions of fibre reactive azo dyestuffs.
144449	7-5-1976	Do.	Process for the preparation of stable mono-azo dyestuffs.
144514	28-5-1976	Do.	Process for the preparation of stable modification of a disazo dyestuff.
144534	27-4-1976	Do.	Process for preparing-1 (n-B cyanethylamine) 3-acylamino-benzenes.
144645	23-7-1976	Do.	Process for the preparation of water-soluble copper complex compounds.

1	2	3	4
144979	1-7-1976	Hoechst Ag, 6230, Frankfurt/Main 80, W G	Liquid composition soft reactive dyes.
146167	18-11-1977	Do.	Process for the preparation of water soluble dyestuffs.
146121	3-6-1977	Do.	A process for preparing stabilized red phosphorous
146325	7-12-1977	Do.	A water free solid water soluble dyeing compositions.
146933	15-9-1977	Do.	Process for modifying mixtures of azo-dyestuffs unstable under dyeing condition.
147048	3-12-1977	Do.	Process for making stabilized red phosphorous.
148129	27-7-1977	Do.	Improved process for the manufacture of B-sulphate ethyl-sulphonyl amino phenol compounds.
148322	27-7-1977	Do.	Improved process for the production of an organic dyestuffs containing 1, 2, 3 or 4 B-sulphate ethyl sulphonyl groups.
148409	7-4-1978	Do.	Process for the preparation of abrasion resistant non-dusting and water-soluble dyestuff particles in a fluidized bed.
148986	17-5-1978	Do.	Process for the continuous manufacture of 3-nitro 4-acetyl amino-folone and corresponding apparatus.
149614	9-8-1978	Do.	Process for the preparation of novel disperse azo dyestuffs.
149992	15-9-1978	Do.	Process for preparing a finely divided diazine pigment.
150012	12-6-1978	Do.	A process for the preparation of azo pigment.
150125	8-12-1978	Do.	Process for the manufacture of a copper, cobalt or chromium complex compound of a monoazo compound.
150149	13-7-1978	Do.	Process for the preparation of polyvinyl butyral having improved properties.
150238	4-2-1980	Do.	Process for the preparation of 5-Bitrobenzodiazolone-(2).
150312	14-8-1978	Do.	Process for the manufacture of fatty acid nitriles and glycerol from glycerides, especially from natural fats and oils.
150365	26-10-1978	Do.	Process for the manufacture of water soluble dyestuffs.
150366	26-10-1978	Do.	Process for the preparation of water soluble azo dyestuffs.
150367	26-10-1978	Do.	Process for the preparation of water-soluble dyestuffs.
150368	26-10-1978	Do.	Process for the preparations of water soluble dyestuffs.
150542	3-10-1978	Do.	Process for the preparation of water-soluble phthalocyanine compounds.
150592	21-12-1978	Do.	Process for the preparation of 5-(2'-hydroxy-3' Naphthoylamo) --Benzimidazolone-(2).
150948	14-2-1979	Do.	A process for the manufacture of a new watersoluble dyestuffs.

1	2	3	4
150949	28-5-1979	Hoechst Ag. 6230, Frankfurt/Main 80, W.G.	Process for the preparation of water-soluble phthalocyanine dyestuffs.
150967	17-3-1979	Do.	Process for the preparation of red phosphorus stabilized against oxidation.
151048	22-3-1979	Do.	Improvements in a process for the continuous dyeing of flat textiles structures made of cellulosic fibers and of their mixtures with synthetic fibers.
151785	12-6-1979	Do.	An improved process for continuous diazotization of amine.
152341	10-1-1980	Do.	A composition of a disperse dyestuff.
152346	17-3-1980	Do.	Process for the separation of 2-hydroxy-naphthalene-3-carboxylic acid from the reaction mixtures of alkali metal salts of 2-hydroxy naphthalene and carbon dioxide.
152496	3-11-1980	Do.	A process for the manufacture of copper complex formazan compounds.
152725	12-10-1979	Do.	Continuous production of azo pigments.
152786	14-12-1979	Do.	A process for the preparation of monoazo pigment which will have recrystallization resistant properties.
152897	24-10-1980	Do.	A pulverulent or liquid dyestuff composition.
152978	29-6-1981	Do.	Process for the preparation of water-soluble azo compounds.
152991	14-2-1979	Do.	A process for the manufacture of new water-soluble dyestuffs.
153342	23-12-1980	Do.	Process for the manufacture of desulfurizing agents based on calcium oxide containing calcium carbide for crude iron or steel melts.
153408	3-11-1980	Do.	Process for the preparation of copper formazan compounds.
153476	1-12-1980	Do.	Process for the preparation of water-soluble azo dyestuff compounds.
153490	21-12-1978	Do.	Process for the preparation of 5-(2'-hydroxy-3'-naphthylamino)-Benzimidazolone-(2).
153496	3-11-1980	Do.	Process for the manufacture of stabilized, pulverulent red phosphorus.
153853	16-5-1981	Do.	Process for dyeing and printing fiber materials containing or consisting of natural cellulose fibers, natural polyamide fibres and/or synthetic polyamide fibers.
154195	26-10-1978	Do.	Process for the manufacture of water-soluble dyestuffs.
154434	1-7-1981	Do.	Process for the preparation of water-soluble phthalocyanine compounds containing a sulfonyl cyanamide group.
154589	28-4-1980	Do.	Process for the production of liquid chlorine.
154643	9-8-1980	Do.	Process for preparing water-soluble phthalocyanine compounds.

1	2	3	4
154872	4-3-1981	Hoechst Ag. 6230, Frankfurt/Main 80, W.G.	Process for the preparation of 1-(B-sulfa-toethylsulfonyl-phenyl) pyrazolone by esterification.
154873	4-3-1981	Do.	Process for the preparation of sulfatoethyl-sulfonyl compounds.
154874	4-3-1981	Do.	Process for the preparation of aminobenzonitrile sulfuric acid half-ester compounds.
154951	3-6-1981	Do.	Composition containing colorants and esterified oxalkylated of aromatic hydroxy compounds.
154958	19-8-1980	Do.	A process for providing a fiber material with a finished (improved) property.
155265	23-12-1980	Do.	A process for manufacturing a desulfurizing agent.
155374	31-8-1981	Do.	Process for preparing water soluble disazo compounds.
155494	2-7-1981	Do.	Process for the manufacture of water-soluble azo compound.
155772	26-4-1982	Do.	Process for preparing anthraquinone compounds.
155836	5-1-1982	Do.	Process for the manufacture of mineral acid salt of diphenyl bases.
156063	8-12-1982	Do.	Process for making 1, 2-dichloroethane.
156075	27-7-1981	Do.	Process for the preparation water soluble fiber reactive compounds containing A-B chloroethylsulfonylmethyl benzoyl amide radical.
156278	18-10-1982	Do.	Process for preparing water-soluble mono-azo-pyridone compounds.
156400	1-12-1980	Do.	Process for the preparation of water soluble azo dyestuffs compound.
156403	16-5-1981	Do.	Process for the preparation of water soluble metal free or heavy metal complex compound.
156477	30-10-1981	Do.	Process for the preparation of water-soluble disazo compounds.
156505	18-12-1982	Do.	Process for removing molybdenum from aqueous manganese salt solutions.
156526	1-12-1982	Do.	Process for the preparation of obligate methylotrophic bacteria.
156610	5-2-1982	Do.	Process for the preparation of anionic surface active compounds based on oxyalkylated naphthol novolacs.
156867	14-10-1981	Do.	Process for preparing dust free pigment granules of high tintorial strength.
156869	30-10-1981	Do.	A process for the preparation of water-soluble monoazo compounds.
156933	20-11-1982	Do.	Process for making 1, 2-dichloroethane.
156958	21-9-1982	Do.	Process for making 1, 2-dichloroethane,
156990	31-9-1982	Do.	A process for preparing water soluble mono-azo compounds.

157075	19-7-1982	1toechst Ag. 6230, Frankfurt/Main 80, W.G.	Process and device for making alkali metal phosphates by spraying alkali metal phosphate solutions or suspensions.
157123	14-6-1982	Do.	A process for the preparation of polymerization catalyst.
157124	14-6-1982	Do.	A process for the preparation of a polymerization catalyst.
157126	1-7-1982	Do.	Process for preparing copper complex mono-azo compounds.
157238	1-7-1981	Do.	A process for the preparation of water-soluble phthalocyanine compounds containing a sulfonyl cyanamide group.
157300	19-7-1982	Do.	Process for the preparation of water soluble diazo compounds and new Bis-(amino-phenoxy)-ethane compounds having fibre-reactive groups as the tetrazo compounds.
157311	1-9-1982	Do.	Process for preparing water soluble disazo compounds.
157428	12-8-1982	Do.	A process for the preparation of a water soluble monoazo compounds.
157455	5-5-1983	Do.	Process for preparing water soluble azo compound.
157459	7-4-1982	Do.	Process for removing molybdenum from aqueous salt solutions especially manganese salt solutions.
157495	14-5-1982	Do.	Process for preparing water-soluble disazo compounds.
157496	13-8-1982	Do.	Process for preparing water-soluble disazo compounds.
157497	21-1-1983	Do.	Process for preparing water-soluble disazo compounds.
157663	21-2-1983	Do.	A process for the continuous dyeing of fabric webs.
157685	19-8-1980	Do.	Process for preparing water soluble phthalocyanine compounds.
157904	17-1-1983	Do.	Process for the preparation of water-soluble copper complex disazo compounds.
158076	3-1-1983	Do.	Process for making a titanium dioxide concentrate.
158237	15-10-1982	Do.	Process for preparing water-soluble azo compounds.
158270	2-5-1983	Do.	A process for preparing water soluble disazo compounds.
158322	14-2-1983	Do.	Process for the preparation of water-soluble disazo dyestuffs.
158501	5-11-1982	Do.	Process for preparing water-soluble disazo compound, processes for their preparation.
158546	27-7-1981	Do.	Process for the preparation of water-soluble fibre reactive dyestuff containing a B-chloroethylsulphonyl-methyl benzoyl amino radical.

1	2	3	4
158547	27-7-1981	Hoechst Ag, 6230, Frankfurt/Main 80 W.G.	Process for the preparation of water soluble, heavy metal complex dyestuffs.
156492	21-3-1983	Hoogovens Groc/B. V. P. O. Box 10'000, 1970 CA IJmuiden, the Netherlands.	Process for producing steel in a converter from pig iron and ferrous scrap.
144322	19-4-1975	ICI Ltd., Imperial Chemical House, Mill Bank, London SW 1 P, England.	Process for the manufacture of calcium sulphate alpha-hemihydrate.
146613	26-7-1977	Do.	A method of preparing a hardened calcium sulphate hemihydrate plaster.
147300	26-7-1977	Do.	A set-inhibited aqueous calcium sulphate hemihydrate plaster slurry composition.
153504	19-12-1979	Do.	A process for the oxidation of a substituted aromatic compound.
154310	13-6-1980	Do.	A process for the preparation of a cementitious product.
154435	21-12-1982	Do.	A method for preparing an aqueous concentrated emetic herbicidal composition.
154758	30-9-1980	Do.	Process and apparatus for the mixing of fluids and solids.
155006	19-6-1980	Do.	Process for the production of an aromatic dicarboxylic acid.
155133	13-10-1980	Do.	A process for producing hydrocarbons.
155666	27-3-1981	Do.	A process for producing a cement product.
156031	1-5-1981	Do.	A process for the production of olefins.
156070	20-5-1981	Do.	A continuous process for the production of iso-or-terephthalic acid.
156216	26-5-1981	Do.	Oxidation of substituted aromatic compounds to aromatic carboxylic acids.
157542	1-1-1982	Do.	Process for the production of 1, 2-dichloroethane by oxychlorination of ethylene in the presence of a catalyst.
146351	7-5-1976	Imperial Metal Industries (Kynoch) Ltd., Kynoch Works, Witton, Birmingham B6 7BA, England.	A method of manufacturing an alloy of Titanium.
153898	1-4-1981	Interrox Chemicals Ltd., Hanover House 14, Hanover square, London WJR 0BE, England.	Liquid detergent composition and process for making the same.
155074	20-7-1981	Ion Exchange (India) Limited, Tilcon House, Dr. E. Moses Road, Bombay-400011, Maharashtra, India.	Process for the preparation of an improved macroporous anion exchanger in the form of substantially spherical beads or droplets.
154108	21-3-1981	I.S.C. Smelting Ltd., 6 St. James's Square, London SW 1 Y 4LD, England.	Method of manufacturing zinc, with improved step of charging zinc smelting blast furnaces.
156789	4-3-1983	Do.	Roasting of mixed sulphide ores or concentrates.
156079	2-3-1983	Italfarmaco S.P.A. Viale Fulviotesti 330, Milano, Italy.	A method of preparing succinylated proteins containing iron.

COMMERCIAL WORKING OF PATENTED INVENTIONS.

LIST. III

The following patents in the field of Mechanical and General Engineering Industry are not being commercially worked in India as admitted by patentees in the statements filed by them under Section 146(2) of the Patents Act, 1970 in respect of calendar year 1987 generally on account of want of request for licences to work the patented invention. Persons who are interested to work the said patents commercially may contact the patentees for the grant of a licence for the purpose.

Patent No.	Date of Patent	Name & Address of the Patentee	Title of the invention
1.	2.	3.	4.
144384	03-05-1975	Aeroquip GmbH, Auefeld 1, 3510 Hann, Munchen, West Germany.	Pressure hose comprising several layers of reinforcing strengtheners.
141727	26-04-1975	Akademia Medyczna Wroclawie, Pasteura Str., Wroclaw, Poland.	Spatial intrauterine contraceptive insert
147650	15-02-1977	Alexander George Copson, 22, High Street, Yaddlethorpe, Southorpe, Lincolnshire, England.	Normally closed gas exhaust valve and divind gas recovery system incorporating the same.
156480	19-10-1982	Aluminium Pechniey, 28, Rue De Bonel, 69003 Lyon, France.	An apparatus for removal by chipping of electrolysis bath residues from precalcined anodes.
157081	23-10-1982	Do.	Heating apparatus or circulatory firing open baking furnaces.
152923	17-02-1982	Application Des Gaz, 173, Rue De Bercy, 75012 Paris, France.	Portable gas cooker whose elements are all dismountable.
153020	11-06-1982	Ashok Metal Industries, Bhaktinagar, Tagore Road, Rajkot-360002.	Improvements in or relating to multiwick stoves.
153021	11-06-1982	Do.	Improvements in or relating to multiwick liquid fuel such as kerosene stoves.
157269	02-11-1981	Automotive Products Ltd, Tachbrook Road, Leamington SPA, Warwickshire CV31 3ER, England.	Brake Booster.
155069	19-09-1981	Avery Hardoll Ltd., Downley Road, Havant, Hants, PO 9, 2NW, England.	Liquid storage and measurement system.
157776	02-09-1982	Aumund Fordererbau Gesellschaft Mit Beschränkter Haftung, Saalhoferstr 17, D-1134 Rheinberg 1, F.R.G.	A connection unit for connecting rope ends together.
159133	22-07-1983	Atlantis Energie AG, Thunstrasse 8, 3000 Bern Canton of Berne Switzerland.	Apparatus for automatically directing solar radiation focused by a reflector and a solar power plant comprising such apparatus.
156677	01-01-1983	Beghin-Say 59239 Thumeries, France.	Non-Woven material for medical compresses.
154250	06-03-1981	Beheermaatschappij H.D. Groenveld B.V. No. 542, Ringdijk, 2987 Vz Boines, The Netherland.	A fire proof wall
152261	08-01-1980	BPB Industries Ltd., of Ferguson House, 15 Marylebone Road, London NW 1, England.	A method and apparatus for heat treating particulate material.
149606	28-12-1977	British Aerospace Public Ltd., 100 Pall, London, England.	An arrangement used in take-off flight-deck for an aircraft.
156512	04-03-1982	British Aerospace Public Limited Company, 100 Pall Mall, London, SWY, 6HR, England.	A system for retrieving and/or launching aircraft.
142331	03-10-1975	British Steel Corporation, 33 Grosvenor Place, London, S.W. 1, England.	Improvement in or relating to non-destructive testing apparatus.
153690	12-08-1980	Do.	An apparatus for and a method of continuous casting of metal strip and fragmenting the strip into suitable size.

1.	2.	3.	4.
157859	10-03-1982	British Steel Corporation 33 Grosvenor Place London SW1, England	Apparatus for the shaping of materials such as metals, as well as castable non-metallic materials, such as glass.
156491	23-02-1982	Brown & Williamson Tobacco Corp., 1600 West Hill street, Louisville Kentucky, USA	Cigarette Filter.
152738	25-07-1980	Carl Oscar Alexander Ekman, Box 55, 18251 Djursholm 1, Sweden.	A furnace for burning solid fuel.
155876	11-05-1982(i)	Carlo Engineering Group Plc, Acre Street, Lindley, Huddersfield, West Yorkshire, England.	A card-clothing assembly and a method producing a card-clothing assembly.
4749	22-09-1980	Centre De Recherches Metallurgiques-Centram Voor Research In De Metallurgie, 47 Rue, Montoyer 1040 Brussels.	Method of continuous heat treatment of steel sheet.
156790	22-07-1981	C. I. L. Inc., Dorchester Blvd., West, Montreal Quebec, Canada.	Method of assembling a column of explosives and the column of explosives assembled thereby.
147583	10-02-1976	CLAUDIO ALDECOA LECA DA, Vizcaya 5, Victoria, Spain.	Parachute catch safety and opening mechanism for the braking of aerobombs.
155737	02-12-1975	Cluett Peabody & Co. Inc. 433, River Street, Troy, New York, USA.	A cloth preshrinking and drying apparatus and method therefor.
148002	21-07-1977	Colin William Skelton, 160 Kilaben Road, Kilaben Bay, New South Wales-2283, Australia.	Safety drop brake.
145538	16-08-1976	Compagnie Generale D, Electricite, 54 rue la Boetie 75382 Paris, Cedex 08, France.	A device for generating hydrogen.
155119	04-06-1982	Corning Glass Works, Houghton Park, Corning, New York 14830, USA.	Method of forming a porous glass preform porous glass preform so obtained and an apparatus for carrying out the said method.
156994	26-07-1982	Covington Technologies, 2451 East Orange-thorpe, Fullerton, California 92631, U.S.A.	Apparatus for fabricating a three dimensional lattice structure and method of forming the three-dimensional lattice structure etc
152129	16-05-1979	Crucible Materials Corporation P. O. Box 88, Parking West and Route 60, City of Pittsburgh, State of Pennsylvania 15230, U.S.A.	A method of producing powder metallurgy article.
149304	16-12-1977	Dainichi-Nippon Cables Ltd. 8, Nishino-cho-Higashimukajima, Amagasaki-shi, Hyogoken, Japan.	Apparatus for separating wires.
149659	21-03-1978	Do.	A curing apparatus for the production of shaped articles of cross-linked polymeric material.
149228	12-01-1979	Davy International Aktiengesellschaft Borsigallee 1-7, D-6000 Frankfurt/Main 60, West Germany.	Shaft furnace for gasifying fine-grained fuels in a fluidized bed.
154646	18-07-1981	Dresser Europe S.A. Boulevard du Sovereign 191-197 (B-3) 1160 Brussels, Belgium.	A haulage system for mining machine.
155608	01-10-1981	Dresser U. K. Ltd., 197 Knightsbridge, London SW7 1RJ, England.	A method and apparatus for treating a polluted gas with a liquid.
149325	28-05-1977	DUNLOP LIMITED, Dunlop House, Ryder St. James's London, SW1, England.	Improvements to tyre and wheel rim assemblies.
157987	02-09-1983	Dubson Park Industries, PLC Dobson Park House, Clowick Industrial Estate, Nottingham, England	Mine roof supporters.
156673	09-11-1982	Do	Self advancing roof supports.
144742	21-07-1976	Davidson & Co Ltd, Bridge end, Do fast, Northern Ireland	Rotary Regenerative pre-heaters

1	2	3	4
154247	27-06-1980	Elmer E Reed R D Reed & T N Depew St Louis, Country, State of Missouri, U.S.A.	Apparatus & Method for processing organic materials or materials containing organic constituents into more useful form such as carbon, charcoal, coke carbon black or into gaseous constituents thereof.
151561	08-02-1979	Einhart Industries, Inc, 426, Colt Highway, Farmington, Connecticut 06032, U.S.A.	Apparatus for straight line shearing.
154603	08-02-1979	Do.	Improved apparatus for use with a feeder for shearing gobs from a column of plastic material.
154943	08-02-1979	Do.	Improvement in the apparatus for shearing gobs from a column of plastic use with a feeder material.
154956	08-02-1979	Do.	Apparatus for use with a feeder for shearing gobs from a column of plastic material.
157721	20-06-1983	Etablissements Morel—Ateliers Electromecanique & De Favieres S.A. Favieres—28170, Chateauneuf En, Thymerais, France.	A sleeve for protecting cable splices.
144646	18-09-1976	Festo-Maschinenfabrik Gottlieb Stoll Ulmer Strasse 48, Esslingen a.n. F.R.G.	Connecting apparatus for use in fluid supply lines.
149138	30-12-1977	Festo Maschinenfabrik, Ulmer Strasse 48 Esslingen, West Germany.	Fluid transfer apparatus.
151441	19-09-1979	Do.	Connecting piece for supply lines carrying gaseous or fluid media.
153195	17-09-1979	Do.	Rotary slide valve.
156508	17-01-1982	Flogates Ltd., Sandiron House, Beauchief Sheffield S7, 2RA, England.	Metal folding apparatus and method.
156772	05-03-1982	Do.	Metal pouring apparatus.
140886	24-09-1974	Fluidrive Engineering Company Ltd., Fluidrive Works, Worton Road, Isleworth, Middlesex, England.	Fluid couplings and motor driven installations incorporating the same.
154225	30-10-1981	Geophysical Company of Norway, A.S., Veritasveien 1, 1322 Hovik, Norway.	Apparatus for preparing charts of seismic data.
145828	07-09-1977	George, S. Reppas, 1030 San Raymundo Road, Hillsborough, California 94010, U.S.A.	Combination bed and desk.
145859	22-09-1978	GREER HYDRAULICS INC. 5980 W. Jefferson Blvd, Los Angeles, California 90016, U.S.A.	Pressure Vessel.
157002	20-10-1982	Hamakua Sugar Company Inc., 841 Bishop St. suite 1620, Honolulu, Hawaii 96813, U.S.A.	Process for making compacted shapes of bagasse for increasing its effectiveness as a source of energy.
153289	29-12-1980	Hamon-Sobelco, Societe Anonyme, 50-58, Rue Capouillet, 1060 Bruxelles, Belgium	A corrugated streaming sheet for a furnishing device.
148406	09-12-1977	Hacoba Textilmaschinen GmbH & Co. Kg. 5600 Wuppertal 2, Federal Republic of Germany.	Bobbins for thread form or strip form material.
149157	02-09-1977	HANOTA HOLDING S. S. A. 37 rue Notre-Dame, Luxembourg Great-Duchy of Luxembourg.	Building block set and method of building block sets.
150083	11-07-1978	Hans Ulrichklingenberg, 3274 St., Niklaus Bei Merzigen, Canton of Berne, Switzerland.	Watch case.
154469	01-10-1980	Harlacher AG. Gartenstrasse 7, 8902, Urdorf/H Switzerland.	Apparatus for coating a flat printing screen on one or both sides with a photosensitive emulsion.
156495	09-02-1982	Harold A. McMaster, 707 Riverside Drive, Woodville, Ohio, 43469, U.S.A.	Glass sheet roller conveyor furnace including gas jet pump heating.

1	2	3	4
150031	19-05-1978	Henred Fruehaft Trailers (Pty) Ltd., Private Baag, 5 Bergvlei, Transvaal 20121, South Africa.	An improved freight carrier.
154180	19-05-1980	Do.	Do.
155162	16-10-1980	Do.	An improved folding freight carrier.
154492	27-04-1982	Hitachi Limited, 5-1, Marunouchi 1-chome, Chiyodaku, Tokyo, Japan.	Slurry drip feeding apparatus.
152531	23-10-1980	Do.	Helical winding for inductor.
150622	25-10-1979	Hollingsworth (UK) Ltd. Seaiteliffe Street, Accrington, Lancashire BB5, Orm, England.	Improvements relating to open-end spinning apparatus.
158456	10-05-1983	Do.	Friction spinning apparatus for forming a yarn.
156406	07-08-1982	Honda Giken Kogyo Kabushiki Kaisha, 8-Go, 27 Ban, Jingumae 6-Chome Shibuya-ku-Tokyo, Japan.	Accelerator pump actuating device for a carburetor.
155561	08-11-1982	House Food Industrial Co. Ltd., No. 5-7, 2-Chome Mikuriyasaka Machi, Nigashi-Osaka-Shi, Japan.	Method of preparing dried noodles.
157044	16-06-1982	Do.	Method of improving quality of wheat flour.
158195	19-05-1983	HUBERT EIRICH, Sandweg 16, 6969 Hardheim, West Germany.	An improved method for the restoration of old foundry sand into reusable quality foundry sand.
156992	16-07-1982	Japan Pipe Conveyor Co. Ltd., 1-1, 1-Chome, Sakai-Machi-Kokura-ku-Kita-kyushu-shi, Fukuoka-ken, Japan.	A machine for transferring bulk material using a tubular belt.
157597	16-07-1982	Do.	A device for preventing a flexible tubular belt from twisting for use in a tubular belt conveyor.
156931	23-10-1982	Johnson & Johnson Baby Products, 501 George Street, New Brunswick, New Jersey, U.S.A.	Puzzle Toy.
157534	12-11-1982	Juan Blass Siges Menendez, c/De Poniente, No. 3, Urbanizacion Monte Alina, Pozuelo de Alarcon (Madrid -23) Spain.	A reaction installation for the recovery of zinc-contained in scap, residues and mats of that metal.
158300	19-01-1983	John Stephen Nitschke, 650 W. Front Street, Perrysburg, Ohio 43551, U.S.A.	Improved method and quench unit for tempering a heated glass sheet.
144962	28-04-1976	John Alvin Eastin, PO Box 389, Grant, Nebraska U.S.A.	Apparatus for nitrogenous fertilizing.
144910	22-10-1975	Johnnes Zimmner, Ebenthaler Strasse 133, 9020 Klagenfurt, Austria.	Squeegee device.
150765	16-12-1978	JACQUES HENRI MERCIER, 10 rue des sablons, 75116, Paris, France.	Pressure vessel.
150642	17-08-1978	Kabel Metal Electro GmbH, Kabelkamp 20, Hannover 3000, F. R. G.	Method and apparatus for continuously producing strained linearly extended material obtained thereby.
152035	18-09-1980	Do.	Process for the manufacture of shrink articles such as shrink tubes sleeves caps.
152342	21-01-1980	Koninklijke Emballage Industrie Van Leer B. V. Amsterdamseweg 206, 1182 HL, Amstelveen, The Netherland.	A metod and tool for producing a bushing structure having a polygonal flange.
151887	07-03-1979	Leonard Ornstein, 5 Biltom Road, White Plains New York - 10607, U.S.A.	An osmotic relative humidity sensor-regulator valve.
157356	26-04-1982	Lothar Teske Hegelstr, 15,500 Köln, 90 Federal Republic of Germany.	Discharging device for a loose material bunker.

1	2	3	4
154449	26-11-1981	Maplan Maschinen und technische Anlagen Planungs und Fertigungs Gesellschaft Mbh A-1010 Wien, Schellinggasse 1, Austria.	Double worm extrusion press.
154140	09-01-1980	Marco Gatti Via Bonaldo Stringher 27, 00191 Rome, Italy.	Apparatus for unloading dry loads from ships.
140115	31-12-1974	Marc Yves Vergnet 1, Chemin du val Doux, 'La Pavigne', Toulon, Var, France.	Improvements in or relating to pumps.
156807	18-11-1981	MARLEY COMPANY, 5800 Foxridge Drive, Mission Kansas 66202, U.S.A.	An improved combination fill assembly for water cooling towers.
154626	01-07-1981	Matija Cenanovic 2567 Annelyn Court, Mississauga, Ontario, Canada L5C 2Z7.	Method for repairing a metal pipe by expanding it by a controlled amount at a pre-determined location there along and a device for carrying out said method.
156494	02-03-1976	M. H. Detrick Co. Ltd. 275/281 King Street, Hammersmith, London, England.	Improvements relating to refractory/insulating modules.
139654	19-12-1974	Midrex International B. V., Wilfriedstrasse 12, 8032 Zurich, Switzerland.	Apparatus for cooling a moving bed of solid, gas permeable particles.
145700	10-08-1976	Monovis B. V., Keizersgracht 253, Amsterdam, The Netherlands.	Fluid making machine having a rotatable screw.
157158	15-11-1982	Molins P/C, 2 Evelyn Street, London SE8 5DH, England.	Feeding particulate material especially tobacco.
147431	30-04-1977	Mobil Tyco Solar Energy Corporation, 16 Hickory Drive, Waltham, Massachusetts, U.S.A.	Apparatus for crystal growth.
146320	30-05-1977	Do.	Method and apparatus for reducing residual stresses in crystals while the crystals are being pulled from a melt.
155958	07-01-1982	Mitsui Toatsu Chemicals Inc. & Toyo Engineering Corporation, No.2-5, Kasumigaseki, 3-Chome Chiyoda-ku-Tokyo, Japan.	Continuous bulk polymerization reactor.
152112	17-11-1980	Do.	Granulation process and apparatus therefor.
149965	04-09-1979	Do.	Device for scrapping off deposits from internal surfaces of elongated tubes.
156501	30-04-1981	Mitsubishi Heavy Industries Ltd., 5-1, Marunouchi, 2-Chome, Chiyoda-ku, Tokyo, Japan.	Tire building machine.
151112	25-01-1979	Do.	Post cure inflator.
143209	23-12-1974	Monsanto Company, 800 North Lindbergh Boulevard, St. Louis, Missouri 63177, U.S.A.	A process for manufacturing a fiber reinforced extrudate and a fiber reinforced hose obtained therefrom.
147738	14-11-1977	Do.	Multi-component membranes comprising a porous separation membrane for gas separation and processes for gas separations using the multicomponent membranes.
150764	04-12-1978	Motor Industries Co. Ltd. Hosur Road, Adugodi Bangalore-560030.	Centrifugal governor particularly for varying the instant of spark ignition or instant of fuel injection in internal combustion engines.
147324	03-11-1977	Pechiney Ugine Kuhlmann, 23 Rue Balzac 75008 Paris, France.	A process for purifying the exhaust gasses given off by diesel type internal combustion engine.
153920	29-03-1979	National Research Development Corporation, P. O. Box 236, Kingsgate House, 66/74 Victoria Street, London SW1E, 6SL, England.	Multi-dimensional display equipment.
148980	03-01-1978	Nadella, 133-137 Boulevard National 92505, Rueil-Malmaison, France.	Handle bar steering head set assembly for bicycles and the like.
154675	29-11-1980	Do.	A coupling.

1	2	3	4
155415	14-07-1981	Nederlandse Centrale Organisatie Voor Technische Natuurkunde, P.O. Box 148, The Hague, Netherlands.	An apparatus for controlling the air fuel ratio in a fuel supply system for combustion engines.
154609	24-11-1980	Neotronics Ltd, Parsonage Road, Takeley, Bishops Stortford, Hertfordshire, England.	Apparatus for measuring the degree of efficiency of combustion appliances.
156598	24-05-1982	Office National D'Etudes ET De Recherches Aeropatiales (ONERA) 29 Avenue de la Division Leger, 92320 Chatillon, France.	Blade and for rotary wing of an aircraft and rotary wing provided with such blade ends.
149743	04-05-1978	Okuli or 37800 Toijala, Finland.	Cardboard strip made up of consecutive package blanks.
145896	20-04-1976	OY E Sarlin AB, Kairoksela, Finland.	Centrifugal pump.
145946	24-04-1976	Do.	Pump unit for immersion in a liquid.
148053	25-01-1977	Pandrol Limited, 9 Holborn, London E C IN 2NE, England.	A railway rail and fastening assembly.
146172	12-11-1976	Patpan Inc, Panama City, (Panama).	Apparatus for vacuum drying flat pieces.
149461	17-01-1978	Patpan Inc. C/o, Icana, Gonzalez, Ruiz & Aleman, Callo Aquilino de la Guardia No. 8, Panama City, Panama.	Apparatus for drying flat articles of porous material under vacuum.
151409	07-05-1980	Do.	Apparatus for drying moist skins.
157320	09-11-1982	Paul Legueu 85, Avenue De Mazy, 44380, Pornichet, France.	A cross-country automobile vehicle of the kind suitable for towing and for hoisting loads.
149939	04-05-1978	Peter Jackson, 53/64 Chancery Lane, London, WC 2A 1 H N England.	A heat storage pond.
157956	26-11-1982	PLM AB, Djaknegatan 16, S-201 80, Malmo, Sweden.	Method of manufacturing a container of thermoplastic material.
144629	02-08-1975	Polyfont, Rue Garibaldi BP 50, 59760, Grande Synthe, France.	Method and apparatus for fabricating flat objects.
150619	20-03-1979	P.W.T. Plastic World Technology Limited, 9495 Triesen, Liechtenstein.	A method and apparatus for the continuous extrusion and blowing of thin films of plastic material in particular rigid PVC.
145128	05-11-1975	Proeqq S.A., Riesbachstrasse 57/59, Zurich, Switzerland.	Apparatus for testing hardness of materials.
157957	26-11-1982	Rosemount Inc. 12001 West 78th Street, Eden Prairie, Minnesota 55344, U.S.A.	An apparatus for conveying fluid pressures for use with a differential pressure transducer.
155089	30-12-1981	Roulements Nadella S.A. 61 Route de Foccy 18101, Viezzon, France.	Pulley for use in particular in the textile industry.
154151	28-01-1981	Ronald Priestley 84, Chesterwood Road, Kings Heath, Birmingham 13, England.	A packing sheet for use in contacting and contacting apparatus.
148489	06-07-1977	Robert Emile Justin Cassou & Bertrand Martial, Emmanuel Cassou 61200 L'Aigle France.	Injecting gun for animals in particular for the artificial insemination of cattle.
155189	16-02-1981	Robert Cassou Rue Clemenceau 61300 L'Aigle, France.	Apparatus for transferring animal reproduction elements especially animal embryos and semen.
144900	11-03-1976	Satake Engineering Co. Ltd. 19-10, Ueno-1-Chome, Taito-ku, Tokyo, Japan.	Roll type huller.
154182	05-01-1980	Do.	Automatic control system for hulling machine.
145850	29-03-1977	Schablonentechnik Kufstein G.M.B.H., A 6330 Kufstein-Schaftenau, Austria.	Process for producing a perforation pattern metal foil in pressure screen printing and a pressure-printing screen produced thereby.
157357	26-11-1982	Shell Internationale Research Maatschappij B.V., Carel Van Bylandtlaan 30, The Hague, The Netherlands.	A vertical column for separating liquid from admixture with gas.

1	2	3	4
154267	28-06-1979	Silver Seiko Ltd., 1-51, Suzuki-cho, Kodaira-shi, Tokyo 187, Japan.	A fabric manipulating device for manipulating a knitted fabric on a knitting machine.
152214	28-07-1980	Do.	Collapsible knitting machine.
151724	23-08-1979	Do.	Improvement in a hand operated knitting machine of the type of having a single bed and a plurality of knitting needle.
150109	21-08-1979	Do.	Needle selection mechanism in hand operated knitting machine.
144749	24-05-1975	Societe D'Etudes de Machines Thermiques, S.E.M.T. 2 Quai de Seine, 93202 Saint Denis, France.	Improvements in or relating to a machine crankshaft with improved dynamic balance ration.
156351	16-06-1982	Societe De Vente De L' Aluminium Pechiney, 23 is, rue, Baizac 75008, Paris France.	A rotary gas dispersion device for the treatment of a bath of liquid metal.
157461	06-09-1982	Societe Francaise De Munitions, 11 Impasse, FGaudelct 75011, Paris, France.	A cartridge for hand and shoulder weapons.
145684	15-06-1976	Spie Batignolles Tour Anjon 33 Quai National Puteasuse Harts-de-seine, Paris 8 EME, France.	A device for protecting a structure against effects.
153530	16-12-1980	STUART HOPTON SMALL Hjourung Veien 9, also 3, Norway.	Waste disposal apparatus.
156184	27-05-1982	Do.	Liquid transport apparatus.
152194	22-01-1981	SUBRATA KUMAR GHOSH of 32 G. B. Mondal Road, P. O. Ichapur, Nawabjung, 24-Parganas, India.	An amphibian vehicle.
154650	15-04-1980	(Prof.) Sudhir Kumar Dhar, La Villa Rouge I. C. Mallik Road, P.O. Dhanbad, Bihar India.	Rail joints for permanent way track rails.
152379	09-09-1980	Sulzer-Ruti Machinery Works Ltd., 8630 Ruti, Zurich, Switzerland.	A filling thread-insertion element for looms.
152369	09-09-1980	Do.	Gripper head for a loom for removal of a filling thread from stationary bobbins.
152096	23-09-1980	Do.	Apparatus for coupling a harness motion for a harness frame.
151672	28-05-1979	Sulzer Brothers Ltd., CH-8401, Winterthur, Switzerland.	Means for coupling a hand device to a rotatable shaft.
157386	14-10-1982	Sumitomo Electric Industries Ltd., No. 15 Kita hanma, 5-Chome, Highashi-ku Osaka-shi, Osaka, Japan.	Process for producing heat resistant aluminium alloys wires for conducting electrolysis.
144305	20-06-1975	Sunkist Growers, Inc. 14130, Riverside Drive, Sherman Oaks, California, U.S.A.	Conveyor for fragile objects.
151725	12-09-1979	Susann Incs Clerlia Runiman and John Rory Thomson both of 6 Birkdale Crescent, Mount, Osmond, State of South Australia.	Apparatus for the administration of parental fluids.
157162	03-07-1981	The Secretary of State for Defence, Whitehall London SW1A 2HB, England.	A fire arm.
157617	24-12-1982	The Jacobs Manufacturing Company, 22 East Dudleytown Road Bloomfield Connecticut 06002 U.S.A.	Engine retarding system.
139283	21-12-1974	The Fertilizer Corporation of India Ltd., P. O. Siadri, Dhanbad, Bihar, India.	Improvements in or relating to construction of grates in a fluidized bed furnace.
155939	17-06-1981	The Secretary of State for Defence in her Britannic etc., Whitehall, London, SW1A 2HB, England.	Track link for a tracked vehicles.
156151	27-12-1979	Do.	Improvements in or relating to breech mechanisms.
144796	27-06-1977	The Tata Iron & Steel Co. Ltd. Jamshedpur, Bihar India.	A cold defonation process for the manufacture of reinforcing metal bars.
146663	03-11-1977	Do	Improved method of making hot chalks.
146728	25-05-1977	Do.	Sliding gate valve mechanism used for treating hot metal from the ladle.
149165	13-02-1978	Do.	A device for use in the application of explosive cladding.

1	2	3	4
153156	07-12-1979	The Timken Company 1835 Dueber Ave South West Canton, Ohio, U.S.A.	Multitow bearing.
147193	21-03-1977	Thomas Hugh Shepherd, North Greenwood Avenue, Hopewell New Jersey 08525, U.S.A.	A mold constructed of thermoplastic material and a process for producing contact lenses.
148889	17-06-1977	Thos Storey (Engineers) Limited, 8th South Wharf Road, London W2 1PB, England.	Prefabricated panels for bridges.
148113	28-10-1977	Tomoe Technical Research Company 2-91-1 Houjyo-Naka, Higashi-Osaka-shi, Osaka, Japan.	Butterfly valve.
143397	15-05-1976	Tuomo Halonen OY 37800 Toijala, Finland.	Method for uniformly heating a flowing substance such as a liquid or gas.
155614	20-05-1982	Voest-Alpine AG, A-1011, Vienna, Friedrichstrasse 4, Austria.	Device for cooling the bits of a cutting machine.
155284	11-01-1983	Do.	Device for drying of solid materials.
153112	01-04-1981	Do.	System for monitoring the movement of a cutting tool of a tunnel driving machine relative to a desired profile.
151517	22-07-1981	Do.	Tracklaying cutting machines.
151400	04-08-1979	Do.	Device for cooling the cutter teeth of a cutter tool.
146893	16-08-1976	Do.	Drive means arrangement for cutting heads.
158299	13-01-1983	Vallourec 7 Place du Chancelier, Adenauer, 75016, Paris, France.	Method of manufacturing of hollow bodies by continuous casting with the aid of a magnetic field etc.
153730	29-12-1980	Do.	A method of producing an assembly by fixing a tube by expansion.
156802	26-03-1982	Unisearch Ltd. 221-227, Anzac Parade Kensington New South Wales, Australia 2203.	Improvement in wind driven machine.
155550	03-10-1975	USS Engineers and Consultants Inc. 600 Grant Street Pittsburgh, State of Pennsylvania, U.S.A.	Slidable gate mechanism.
149715	20-08-1975	Do.	Method and apparatus for locating improperly positioned or bent rolls.
148762	08-08-1977	Do.	A nozzle for preventing alumina build up during continuous casting of aluminium killed steel.
143588	27-02-1974	Do.	An arrangement for conducting gas to a permeable plug in combination with a bottom pour vessel.
141631	27-02-1974	Do.	Operating mechanism for slideable gates of bottom pour vessel.
139602	04-06-1974	Do.	Apparatus for introducing gas to hot metal in a bottom pour vessel.
148086	16-03-1978	Youngflex S. A. 1 Rue Fries, 1701 Fribourg Switzerland.	A cushion support structure for incorporating in a seat.
148408	21-02-1978	Do.	Cushion support element.
155816	31-12-1975	Warco Westinghouse SpA, Via Pier Carlo Boggia 20, Turin, Italy.	Brake release accelerating device in automatic gradual discharge fluid brake.

1	2	3	4
155658	15-02-1982	Westinghouse Electric Corporation (W.E.C.) Westinghouse Building, Gateway Center, Pittsburgh, Pennsylvania - 15222, U.S.A.	Catalytic combustion system for stationary gas turbine.
155659	15-02-1982	Do.	Improved catalytic combustion system for stationary combustion turbine having a transi- tion duct mounted catalytic element.
152740	02-08-1980	Do.	A method of applying an entire electric coating on silicon and a coated silicon chip thereby obtained.
152440	16-09-1980	Do.	Heat exchangers.
148148	03-09-1977	Do.	Apparatus for applying insulating coating on elongated metallic chamber.
148055	07-04-1977	Do.	A rotor assembly for a gas turbine engine.
145417	23-10-1976	Do.	A method of producing homogeneous sintered 2 No. non linear resistors, sintered resistors body obtained thereby and lightening arrestor containing the same.
142666	16-07-1974	Do.	High pressure laminate and method of making the same.
142679	19-07-1975	Wiegand Karlsruhe GMBH, Einsteinstrasse 9-15, Ettlingen 7505, FRG.	Improvements in or relating to gas scrubbing apparatus.
151001	26-10-1979	W.M. R. Stewart & Sons Ltd., Marine Parade, Dundee DD1 3JD, Scotland.	Lag or stave assembly for kirschner beaters.
153213	20-01-1981	Do.	Pinned component for textiles machinery and method of forming the pinned compo- sition.

ELECTRICAL LIST III

COMMERCIAL WORKING OF PATENTED INVENTIONS

The following patents in the field of Electrical Engineering Industry are not being commercially worked in India as admitted by patentees in the statement filed by them under section 146(2) of the Patents Act, 1970 in respect of calendar year 1987 generally on account of want of request for licences to work the patented invention. Persons who are interested to work the said patents commercially may contact the Patentees for the grant of a licence for the purpose.

Patent No.	Date of Patent	Name & Address of the Patentee	Title of the invention
1	2	3	4
153964	4-6-1981	Aluminium De Grece, 4 rue de l'Academie Athens, 104 Greece.	Apparatus for introducing alumina in a tank for producing aluminium by electro- lysis of alumina dissolved in molten cryolite.
157592	16-1-1982	Asahi Glass Co. Ltd. No. 1-2, Marunouchi, 2 chome, Chiyoda Ku, Tokyo, Japan.	Improved filter press type electrolytic cell.
146424	13-4-1977	Baldach Corporation, Williamsburg, State of Virginia 23185 U.S.A.	Integral, electrically conductive textile filament.
157611	5-10-1982	British Railways Board 22, Marylebone Road, London N.W. 1, England.	Control system for controlling the passage of vehicles.
156490	21-5-1982	Chugai Denki Kogyo Kabushiki Kaisha, 13/3, Nihonbashi-Kayabacho, 2-chome, chuo-Ku, Tokyo, Japan.	Method of preparing improved electrical contacts made of silver alloy.
156799	22-7-1981	CIL, INC 630 Dorchester BLU West Montreal Quebec Canada.	Method of assembling a column of explosive and the column of explosives assembled thereby.
152705	16-6-1980	Contraves Italiana, S.p.A. 102-00131, Rome, Italy.	An integrated radar antenna array.
155670	15-5-1981	Energy Conversion Devices Inc., 1675 West Maple Road, Troy, Michigan 48084 U.S.A.	A method of making p-doped silicon films.

1	2	3	4
157462	27-9-1982	Energy Conversion Devices, 1675 West Maple Road, Troy, Michigan, 48084, U.S.A.	Multiple chamber deposition and isolation system for producing a body of material.
157618	25-2-1983	Do.	Improved photovoltaic devices having incident radiation directing means for total internal reflection.
157875	7-2-1983	Do.	A method of fabricating improved photovoltaic devices.
158164	15-5-1981	Do.	A method of forming successively by glow discharge deposited silicon-containing alloys of opposite (p and n) conductivity type.
156735	20-4-1983	Evans Adlard & Company Limited, Postlip Mills, Winchcombe, Cheltenham, Gloucestershire GL54 5BB, England.	Glass fibre paper separator for electrochemical cells.
141958	17-10-1974	Hitachi Limited, 5-1, 1-Chome, Marunouchi, Chiyodaku, Tokyo, Japan.	Regenerative brake control system for DC motor.
149358	15-3-1978	Do.	Electrically insulated windings.
152629	29-5-1980	Do.	Transparent flat panel speaker.
152962	28-5-1981	Do.	Process for producing electric insulated coils.
152963	—	Do.	Insulated electrical coil
153174	21-10-1981	Do.	Three-phase and three-leg core of a core type transformer.
154797	27-8-1981	Do.	Apparatus for switching an operation of water wheel or pump water wheel.
155774	24-1-1983	Do.	Glass-molded semiconductor device.
156110	31-5-1982	Do.	Improvement in or relating to a SF ₆ gas insulating electrical circuit breaker.
156767	12-10-1982	Do.	D.C. motor for a vehicle.
150739	13-12-1978	Holec Systemen En Componenten B.V., Tuindorpstraat 61, 7555 CS Hengelo C.V., Netherlands.	Three phase vacuum switch or like for interrupting an inductive load in a three phase high voltage network.
155109	22-10-1981	International Telephone & Telegraph Corp., 320, Park Avenue, New York 10022, New York, U.S.A.	A digital recursive automatic equalizer.
155110	22-10-1981	Do.	Digital telephone line circuit providing an analog digital interface.
155460	22-10-1981	Do.	A circuit for digitally synthesizing an impedance.
156464	22-10-1981	Do.	A circuit for separating the channels in a duplex system such as in a telephone line, circuit.
156564	22-10-1981	Do.	A digital two-to-four wire conversion circuit for a telephone subscriber line.
154480	30-10-1981	Jeumont-Schneider, 31-32, Quai de Dion Boulon, 92811 Puteaux cedex, France.	A control circuit for a direct current motor during traction or braking.
144193	6-10-1975	Johannes Zimmer, Ebentalerstrasse 133, 9020 Klagenfurt, Austria.	A device for treating a web of material.
151783	9-10-1980	Kabelmetal Electro GmbH, of 271 Vahrenwalder Strasse, 3000 Hannover, Germany.	Moisture proof plastic insulated electric cable particularly for the transmission of higher voltages.

1	2	3	4
153727	11-8-1982	Khaitan (India) Ltd., 46C, J. L. Nehru Road, Calcutta 700071, West Bengal, India.	Electrical Ceiling Fan.
152797	11-8-1980	Lucas Industries Ltd., Great King Street, Birmingham B19, 2XF, England.	A secondary zinc electrode and a cell employing such electrode.
146642	21-6-1977	Marston Excelsior Ltd., Wobaston Fordhouses, Wolverhampton WV10 6QJ.	Electrode for use in a diaphragm or membrane cell.
144958	15-4-1976	Maschinenfabrik Reinhaysen Gebruder Scheubeck KG, 8, Falkensteinstrasse 8400 Regensburg, 12, Federal Republic of Germany.	A tap selector for a tap switch assembly of a tapped transformer.
155520	20-10-1975	Maschinenfabrik Reinhaysen Gebruder Schenbeck GmbH & Co. Kg. 8, Falkensteinstrasse, 8400 Regensburg 12, F.R.G.	Tap changes equipment for three phase regulating transformers.
155798	27-4-1982	Mitsubishi Denki Kabushiki Kaisha, 2—3, Marunouchi 2-chome, Chiyodaku Tokyo, Japan.	Method of producing an electrically insulated conductive body.
156898	27-7-1982	Do.	Input converting circuit.
157465	24-1-1983	Do.	Air circuit breaker.
157572	24-1-1983	Do.	Air circuit breaker.
157722	24-1-1983	Do.	Air circuit breaker.
146898	19-10-1976	Mobil Tyco Solar Energy Corporation, 16 Hickory Drive, Waltham, Massachusetts, U.S.A.	Method of producing ribbon-like crystal like bodies for use in fabricating solar cells.
146899	19-10-1976	Do.	Manufacture of semi-conductor ribbon and solar cells.
147720	6-1-1978	Peico Electronics & Electricals Ltd. Shivsagar Estate, Block 'A', Dr. Annie Besant Rd., Worli, Bombay-400018.	An electronic start and stop circuit for operating the turntable of a record player.
148922	10-4-1978	Do.	An optically operable electronic tripping circuit.
158048	8-4-1983	Permelec Electrode Ltd., No. 1159, Ishikawa, Fujisama-shi, Kanagawa, Japan.	A process for the production of an ion exchange membrane with a coating thereon for use in electrolysis.
154802	1-10-1981	Rosemount Incorporated, 12001 West 78th Street, Eden Prairie, Minnesota-55344, USA.	Capacitive pressure transducer with isolated sensing diaphragm.
152200	11-4-1979	Satake Engineering Co. Ltd., No. 1-19-10, Ueno, Taito-ku, Tokyo, Japan.	Automatic control apparatus for an oscillating grain separator.
152277	17-12-1979	Do.	Particle color discriminating apparatus.
152410	18-9-1980	Satake Engineering Co. Ltd., No. 19-10, Ueno-1, Taito-ku, Tokyo, Japan.	Automatic control device for a boundary plate of a grain separator.
156274	28-4-1982	Shri Samar Lal Maitra, No. D-4/R, S.B. Colony, Durgapur 713211, Dist-Burdwan (W.B.)	A system for energising a radio and/or a tape-recorder in "To-the-Minute," accurate time.
155849	25-1-1982	Societe Nationale Industrielle Aerospatiale, 37, Boulevard de Montmorency, 75016 Paris, France.	Aerial simulator for ground illumination by means of electromagnetic pulse adapted for determination of the dielectric constant and conductivity of a selected ground.
146413	11-10-1976	Solo Industries Pty. Ltd., 15-21 Reynolds street, Balmain, New South Wales, Australia.	Transistor ignition circuit for an internal combustion engine.
144792	5-7-1976	The Tata Iron & Steel Co. Ltd. Jamshedpur, State of Bihar, India.	Apparatus for carrying out the electro-slag/electro-flux refining process for metals.
142422	30-6-1975	USS Engineers and Consultants, Inc. 600 Grant Street, Pittsburgh, State of Pennsylvania, USA.	Electrolytic treating apparatus.

1	2	3	4
145774	15-7-1977	Union Carbide India Limited 1, Middle ton Street, Calcutta-700071 West Bengal, India.	Electric flashlight.
146338	3-7-1978	Do.	Separator electrolyte paste & zinc manganese dioxide dry cell of improved leak proofness containing same.
149030	24-2-1979	Do.	An improved electric flashlight.
154805	25-3-1983	Union Carbide India Ltd., 1, Middleton street, Calcutta-700071, West Bengal, India.	Dry cell torch with adjustable focussing head.
148981	24-4-1978	Ushio Denki Kabushiki Kaisha 6-1, Ole-machi, 2-chome, Asahi-Tokai Building, 19-floor, chiyoda-ku, Tokyo, Japan.	Rare gas discharge lamp.
148982	24-4-1978	Do.	Discharge lamp.
141767	2-9-1974	Westinghouse Electric Corporation, Pittsburgh, Pennsylvania, U.S.A.	Molded magnetic cores utilizing cut steel particles.
142536	23-7-1975	Do.	A circuit interrupter for a distribution transformer.
142937	10-6-1974	Do.	A high voltage electrical device incorporating epoxy anhydride prepgs.
143218	13-1-1975	Do.	Circuit interrupter with electromagnetic opening means.
143832	31-3-1976	Do.	Circuit interrupter.
144169	29-4-1975	Do.	Electrical bushing a spiral tap assembly.
144307	20-8-1975	Do.	Dynamo electric machine.
145181	25-11-1975	Do.	Electrical apparatus having conductors boarded to ether with flexible belts.
145208	26-11-1975	Do.	Electro mechanical apparatus for securing & winding conductors of a turbine generator.
145299	12-9-1975	Do.	Surge arrester construction.
145796	22-12-1976	Do.	Low voltage vacuum switch and operating machine.
145863	29-9-1976	Do.	Capacitive voltage transfromer with improved compensating reactor arrangements.
146197	29-1-1977	Do.	Surge Arrestor gap and grading means.
146205	10-8-1976	Do.	Circuit interrupters.
146274	7-4-1977	Do.	Capacitor.
146387	24-2-1977	Do.	Circuit breaker with improved trip means having a high rating shunt trip.
146560	6-10-1976	Do.	Capacitive voltage transformer.
146748	22-12-1976	Do.	Low voltage vacuum shorting switch.
146788	10-6-1974	Do.	Flexible non-tacky prepgs and method of making same.
146804	10-8-1976	Do.	Circuit interrupters for oil filled distribution transformers.
147292	2-3-1977	Do.	A method of producing semi-conductor switching devices.
147814	7-4-1977	Do.	A method of fabricating tynistor and diode semiconductor devices by tailoring or modifying their recovery charges.
148735	8-5-1978	Do.	Package for high triggered semi conductor device.

1	2	3	4
148845	23-9-1977	Westinghouse Electric Corporation Pittsburgh, Pennsylvania, U.S.A.	Semi conductor switching devices.
149273	20-12-1977	Do.	Apparatus for protection against subsynchronous currents in a power system.
149575	28-2-1978	Do.	Vacuum switch system for electrolytic cells.
150329	10-12-1979	Do.	A method of making semi conductor devices and semi-conductor devices produced thereby.
150490	10-5-1978	Do.	Electrical apparatus such as capacitors containing dielectric fluid.
150718	11-7-1979	Do.	Dynamoelectric machines.
150911	14-3-1979	Do.	A method for producing voltage limiter suitable for use in gapless lightning arresters.
151021	8-11-1978	Do.	Capacitor structures for use in power capacitors having high stress capability.
151120	22-8-1979	Do.	Var generators.
151262	12-7-1979	Do.	Low voltage vacuum switch.
151456	20-2-1980	Do.	Apparatus for recovering slip frequency power from a wound rotor induction motor.
151730	18-11-1980	Do.	Electric switching device.
151842	22-3-1980	Do.	An electrical control device.
151851	19-10-1979	Do.	Light-activated semi-conductor switches.
151852	19-10-1979	Do.	Low voltage vacuum switchos.
152036	5-2-1981	Do.	Protected motorpump unit.
152206	10-1-1980	Do.	Iron engaging slot wedges for dynamo electric machines and dynamoelectric machines comprising the same.
152332	20-7-1979	Do.	Light activated semi-conductor switches.
152409	14-8-1980	Do.	Switch operator for use with a switch.
152428	20-12-1979	Do.	A method of forming an irradiated region of a desired thickness, dosage and dosage gradient in materials such as semi conductor bodies by nuclear radiation.
152603	4-7-1980	Do.	Dynamoelectric machines.
152658	28-11-1980	Do.	A process for preparing PNPN thyristors.
153110	28-1-1981	Do.	Multiplexed data acquisition systems.
153171	25-3-1981	Do.	Vacuum electric circuit interruptors.
154158	28-4-1981	Do.	Electrolytic cell electrical shunting switch assembly.
154190	25-3-1981	Do.	Improved dielectric fluids.
154271	11-6-1981	Do.	A method of making thyristors.
154783	14-5-1981	Do.	Var generators.
154896	25-6-1981	Do.	Process for making semiconductor devices and semi-conductor devices thereby obtained.
154972	5-11-1981	Do.	Electrical switching device.
155071	27-7-1982	Do.	Sliding window power demand control system.
155996	13-1-1983	Do.	Static var generators.
156321	3-6-1982	Do.	Operating mechanism for low DC voltage, high continuous current electrical shunting switches.
156450	29-7-1982	Do.	Digital communication systems.
154355	26-2-1981	Xerox corporation, Xerox square, Rochester, New York U.S.A.	Fuser system for an electrostatic reproduction apparatus.

COMMERCIAL WORKING OF PATENTED INVENTIONS

LIST-III CHEMICAL

The following patents in the field of Chemical Engineering Industry are not being commercially worked in India as admitted by patentees in the statements filed by them under Section 146(2) of the Patents Act, 1970 in respect of calendar year 1987 generally on account of want of request for licences to work the patented invention. Persons who are interested to work the said patents commercially may contact the patentees for the grant of a licence for the purpose.

Patent No.	Date of Patent	Name and address of the Patentee	Title of the Invention
1	2	3	4
156065	12-5-1983	Jansen Pharmaceutical N.V., Turnhoutsebaan 30, B-2340 Beersel, Belgium.	Process for preparing novel N(Bicyclic Heterocycl)-piperidinamines.
156471	31-3-1982	Johnathan L-Kiel 5814 Fort Stanwix, San Antonio, Texas 78233, U.S.A.	A process for preparing a composition possessing cytolytic activity and useful for the control of tumour growth.
143258	12-10-1976	Johnson & Johnson, 501, George Street, New Brunswick, New Jersey, U.S.A.	A conditioning and cleaning shampoo composition non-irritating to eyes.
144597	10-5-1977	Do.	Mixed block polymer adhesive.
145165	8-10-1976	Do.	Low irritation detergent composition.
146069	10-5-1977	Do.	Tacky adhesive composition.
149889	24-7-1978	Do.	Water based pressure sensitive adhesive and process for making the same.
150596	26-3-1979	Do.	Low irritating liquid detergent composition.
150992	10-8-1978	Do.	A process for producing adhesive tapes and sheets from thermoplastic elastomeric materials.
151132	1-5-1979	Do.	Low irritating detergent and cleansing composition.
151133	1-5-1979	Do.	Process of preparing novel betaine derivatives.
151359	10-8-1978	Do.	Pressure-sensitive adhesive composition.
155486	12-2-1982	Do.	A pressure-sensitive adhesive composition.
155957	19-8-1982	Do.	A process for preparing a composition for preventing dental enamel caries.
157896	12-11-1982	John Wyeth & Brother Limited, Huntercombe Lane, South, Taplow Maidenhead, Berkshire, SL60 PH, U.K.	A process for preparing a solid shaped article.
145426	9-9-1977	Kao Soap Co., Ltd., No. 1-1, Kayaba-cho, Nihonbashi, Chuo-ku, Tokyo, Japan.	Composition for increasing yields of pulse.
143470	27-6-1975	Karl Kienzle 7081 Goldshofe, Gstalbkreis, (West) Germany.	Process and apparatus for the production of combustible gas from waste material.
150981	14-12-1978	Kebel-Und Metallwerke Gute Haftungshutte Aktiengesellschaft, 271, Veltenaler Strasse Hanover 3020, Germany.	Process for the production of moisture crosslinkable polymeric or elastomeric composition.
152728	1-2-1980	Kraftwerk Union AG, Mulheim (Ruhr), Wiesenstr. 35, F.R.G.	Method for the gasification of carbonaceous material and the reduction of metallic ores.
151149	20-2-1979	L'Air Liquide Societe Anonyme Pour L'Etude Et L'Exploitation Des Procedes Georges Claudio 75, Quai Orsay-75007, Paris, France.	Apparatus and method of hydrogen enrichment of a purge gas in ammonia production plant.
155786	6-4-1981	Do.	Improvements in or relating to processes of and apparatus for the production of ammonia synthetic gas.

1	2	3	4
158129	31-3-1983	Laboratori Guidotti SpA, Via Trieste 40, 56100 Pisa, Italy.	A process for the preparation of derivatives of 2-diethylamino-1-methyl ethyl cis 1-hydroxy (bicyclohexyl)-2-carboxylate.
153746	20-7-1981	Laboratori Prophin S.P.A. Via Binda 21-20143, Milano Italy.	Process for the preparation of amide derivatives of p-isobutyl-phenyl-propionic acid.
150626	13-9-1979	Laszlo Pasznes 3906 West 33rd Avenue Vancouver, British Columbia (2) Pei-Ching Chang, 180 West 22nd Avenue Vancouver British Columbia, Canada.	A method for the Saccharification of lignocellulose and the concomitant recovery of lignin therefrom.
158843	18-11-1982	Limpha Lyonnaise Ind Pharmaceutique 34, rue Saint Romain-69008, Lyon, France.	A process for the preparation of (oxo-4-4H(1)-benzopyran-8-yl) alkanoic acid derivatives.
158942	18-11-1982	Do.	A process for the preparation of Haloalkyl 8-H(1) benzopyran-4-ones.
156510	11-3-1982	Medical College of Ohio 3000 Arlington Avenue, Toledo Ohio 43699, U.S.A.	Process for the preparation of novel peptides which antagonize the antidiuretic and/or vasopressor action of arginine vasopressin.
143800	20-9-1975	Mettalgesellschaft AG, 16, Frankfurt A.M. Reuterweg 14, West Germany.	Method of carrying out endothermic processes.
143802	31-5-1976	Do.	Process of separating solid granular metalurgical products and their precursors on a plurality of linearly vibrating screens.
143905	2-4-1975	Do.	Process for the direct reduction of iron oxide containing materials in a rotary kiln.
144673	25-8-1976	Do.	Method of carrying out exothermic process.
144686	31-1-1977	Do.	Improvements in or relating to a process of directly reducing iron containing oxide materials to sponge iron.
145951	4-10-1977	Do.	Process for regenerating water-containing methanol or other water containing highly volatile organic solvent from gases.
146890	13-10-1977	Do.	Process of regenerating laden absorbents which become available when hydrocarbon-containing gases are purified.
149817	5-4-1979	Do.	Steel making process.
149993	20-9-1978	Do.	Process of directly reducing iron oxide containing materials.
150387	30-8-1979	Do.	Process for briquetting sponge iron containing material.
150952	12-6-1980	Do.	Process of heat-treating pellets.
150990	19-5-1980	Do.	Process of directly reducing iron oxide containing materials in a rotary kiln.
151853	6-11-1979	Do.	Process of producing hydrogen fluoride.
152825	26-11-1980	Do.	A process for obtaining H ₂ S, CoS, and mercaptans free gas from gases containing the same by absorption in an absorbant solution.
152949	17-6-1981	Do.	Process of simultaneously producing fuel gas and process heat from carbonaceous materials.
154616	28-10-1981	Do.	Method and apparatus for the production of methanol.
156935	21-12-1982	Do.	Improvements in or relating to a process of removing pollutants from exhaust gases.

1	2	3	4
157655	18-5-1983	Metallgesellschaft AG, 16, Frankfurt A.M. Reuterweg 14, West Germany.	Process of regenerating absorbent solutions for sulfur-containing gases.
157799	5-5-1983	Do.	Process of economically producing sulfuric acid and oleum.
157903	11-1-1983	Do.	Process of desulfurizing gases with an amine- containing absorbent solution.
158379	22-10-1983	Do.	Process of producing liquid carbon containing iron.
158419	18-6-1982	Do.	A process of producing sponge iron by a direct reduction of iron oxide-containing materials.
158582	9-2-1984	Do.	Process for the direct reduction of iron oxide containing sintered material to sponge iron in a rotary kiln.
158594	18-6-1982	Do.	Process of producing sponge iron by a direct reduction of iron oxide-containing material in a rotary kiln.
150339	21-11-1978	Metallurgical Development Bahamas Bldg., West Bay Street, Nassau, Bahamas.	Method of smelting zinc in a blast furnace.
152128	16-5-1979	Do.	Pyrometallurgical smelting of an oxidic charge containing lead and copper.
147336	11-1-1978	Midrex International B.V., Wilfried Strasse 12, 8032 Zurich, Switzerland.	Method and apparatus for reducing particulate iron oxide to metallic iron with solid reductant.
152255	14-8-1979	Do.	Method for the direct reduction of iron using gas from coal.
155030	14-8-1981	Do.	Method and apparatus for the direct reduction of iron in a shaft furnace using gas from coal.
151496	7-3-1980	Mitsubishi Gas Chem. Co., 5-2 Marunouchi, 2-chome, Chiyoda-ku, Tokyo, Japan.	Sodium hydrosulfite bleaching composition.
144408	31-3-1976	Mitsui Coke Co. Ltd., No. 1-1, Muromachi 2- Chome, Nihonbashi, Chuo-ku, Tokyo, Japan.	Process for manufacturing coke.
149929	26-10-1978	Mitsui Toatsu Chemicals Inc., No. 2-5, Kasumigaseki 3-Chome, Chiyoda-ku, Tokyo Japan.	Improved process for preparing organic isosyanates.
150770	3-4-1979	Do.	Improvement in a composition containing an oxidation reduction reagents for stellford process of wet desulfurization.
151860	13-12-1980	Do.	Improvement in or relating to a process for synthesizing urea.
151891	13-8-1979	Do.	Process for producing alkanyl phenol and/or its polymer.
151914	25-9-1980	Do.	A process for synthesizing urea.
151962	25-10-1980	Do.	Improved method of manufacturing rubber modified styrene resins.
152042	13-8-1979	Do.	Process for preparing isopropenyl phenol.
152936	3-4-1979	Do.	Process for the preparation of a salt 2-carbo- oxyanthraquinone-mono-sulfonic acid.
152937	3-4-1979	Do.	Process for the preparation of a salt of 2- phenoxyanthraquinone polysulfonic acid.
153897	6-3-1981	Do.	Method of recovering unreacted materials in urea synthesis process.

1	2	3	4
154210	21-5-1981	Mitsui Toatsu Chemicals Inc. No. 2-5 Kasumigasaki 3-Chome, Chiyoda ku, Tokyo Japan.	Improvement in a process for the preparation of a catalyst system for polymerisation of α -olefins.
154422	1-12-1982	Do.	Process for preparing mononitrochlorobenzene.
154813	3-4-1979	Do.	Process for the preparation of a salt of 2-phenoxyanthraquinone polysulfonic acid.
156283	21-8-1981	Do.	Process for synthesizing urea.
156483	17-2-1983	Do.	Process for preparing of 3, 3'-diamino diphenylsulfones.
157031	17-5-1983	Do.	A process for preparing an aromatic alkane derivative.
15J948	18-6-1980	Do.	Process for producing olefin polymers or copolymers.
140863	26-9-1974	Monsanto Co., 800 North Lindbergh Boulevard, St. Louis, Missouri-63177, U.S.A.	A continuous process for the production of ethylbenzene.
144577	20-7-1976	Do.	Process of making thermoplastics elastomeric compositions.
150497	8-11-1978	Do.	A process for preparing thermoplastic compositions.
150552	2-3-1979	Do.	A process of forming nitrodiaryl amine by condensation of nitro-halocrene and formyl derivative of a primary aromatic amine with alkali metal hydroxide.
150612	23-10-1978	Do.	The process for making nitrodiarylamines.
150736	1-11-1978	Do.	A process for the preparation of nitrodiarylamine.
150804	4-1-1979	Do.	Process for making an amide of formic acid.
150937	3-3-1979	Do.	An improved process for the preparation of nitrodiarylamines.
151020	1-11-1978	Do.	A process for the preparation of nitrodiarylamines.
151581	6-3-1979	Do.	Process for separating gas from gaseous feed mixture.
153458	6-3-1979	Do.	Process for synthesizing ammonia from hydrogen and nitrogen.
155268	4-1-1979	Do.	Process for preparing nitrodiarylmino.
156863	18-10-1982	Do.	A process for inhibiting premature vulcanization of a vulcanizable rubber composition.
157128	21-7-1982	Do.	A process for encapsulating water-immiscible material within a shell wall of polyurea.
152086	12-5-1981	Nippon Zeon Co., Ltd., of 6-1, 2-Chome, Marunouchi, Chiyoda-ku, Tokyo, Japan.	Improved process for separating conjugated diolefins hydrocarbons from a hydrocarbon mixture.
153409	5-12-1980	Do.	Method for inhibiting polymerization of conjugated dienes in a process for separating conjugated dienes from a hydrocarbon mixture.
155678	9-12-1980	Do.	Process for extracting distillation.

1	2	3	4
157555	7-10-1982	Nippon Zeon Co.Ltd., of 6-1, 2 Chome, Marunouchi, Chiyoda-Ku, Tokyo, Japan	A process for producing a reactor for preparing vinyl chloride polymer.
152485	8-5-1979	Nissan Chemical Industries Ltd., 7-1-3, Kanda Nishiki-cho, Chiyoda-ku, Tokyo, Japan.	Improved process for polymerizing ethylene.
157330	21-8-1982	Do.	Process for producing polyethylene.
158042	4-6-1982	Do.	A process of preparation of a catalyst for the polymerization or copolymerization of ethylene.
158588	29-3-1985	Do.	An improved process of polymerization or copolymerisation of ethylene.
145851	7-4-1977	Nitto Chemical Industry Co., Ltd., No. 5-1, Marunouchi, 1-chome, Chiyoda-ku, Tokyo, Japan.	Process for producing acrylonitrile.
156786	15-5-1982	Do.	Process for obtaining improved tellurium containing metal oxide catalysts.
156106	30-3-1982	Otsuka Chemical Co., Ltd. No. 10, Bungomachi, Higashi-ku, Osaka, Japan.	Process for the preparation of aminosulphenyl chloride derivatives.
156965	26-2-1982	Do.	A process for preparing 5-methyl N-(N-methyl-N(N-disubstituted aminosulphenyl) carbamoyl)-oxy) thio acetamide derivative.
145617	22-8-1977	Outokumpu OY Toolonkatu 4, SF-00100 Helsinki 10, Finland.	Hydrometallurgical process for the recovery of zinc, copper and cadmium from their ferrites.
147866	26-9-1977	Do.	A hydrometallurgical process for the recovery of valuable metal content from the soluble silicate-bearing materials.
149077	22-11-1978	Do.	A process for the recovery of zinc, copper and cadmium in the leaching of zinc calcine.
150879	22-11-1978	Do.	A process for the separation of phosphate and carbonate minerals from each other by froth-flotation.
151532	16-6-1979	Do.	Process for the selective froth-flotation of sulfidic, oxidic and salt-type minerals.
151790	6-2-1980	Do.	A process for scrubbing cyanide-bearing furnace gases which are produced in the metallurgical industry.
154127	22-11-1978	Do.	An improved process for recovering separately phosphate and carbonate minerals from phosphate carbonate-silicate ores or concentrates.
155458	25-9-1981	Do.	A process for the treatment of a raw materials which contains oxide and ferrite of zinc copper and calcium.
155497	23-9-1981	Do.	A hydrometallurgical process for the treatment of a raw material which contains oxide and ferrite of zinc, copper and cadmium.
155498	23-9-1981	Do.	A hydrometallurgical process for the recovery of lead, silver, Gold and zinc from.
155869	25-9-1981	Do.	A process for the recovery of lead, silver and gold from the iron-bearing residue of an electrolytic zinc process.
143381	21-12-1974	Personal Products Co., Milltown, New Jersey, U.S.A.	Aldehyde polysaccharide dressings for absorbing body fluids.
154551	11-8-1980	Oxysynthese, 6 rue Cognacq-Jay 75007, Paris, France.	Process for the regeneration of chemical reversion catalyst used in a cyclic process for the production of hydrogen peroxide and apparatus therefor.

1	2	3	4
144057	19-11-1975	Personal Products Co., Milltown, New Jersey, U.S.A.	A method of making absorbent cellulose particles.
144261	2-4-1975	Do.	A method for making cellulose graft copolymer.
146230	2-4-1975	Do.	A sanitary absorbent product having cellulose graft copolymer.
152798	25-8-1980	Do.	A method of producing a fibrous absorbent body.
150493	29-7-1978	Petroleo Brasileiro S.A.—Petrobras, Avenida Chile, No. 65 Rio de Janeiro, Brazil.	Process for preparing ethene.
155427	26-11-1981	Projects & Development India Ltd., P.O. Sindhi, Dhanbad, Bihar, India.	An improved process for obtaining stable granular NP fertiliser from incompatible raw materials.
155684	4-12-1981	Do.	An improved process for preparing grassy sodium metaphosphate.
155685	8-12-1981	Do.	A process for the preparation of nitrophosphate fertilizer from rock phosphate.
156125	21-12-1983	Do.	Improvements in or relating to a process for the production of synthesis gas suitable for ammonia manufacture from feed stock, ranging from natural gas to light petroleum distillates.
146057	19-7-1977	Projektierung Chemische Verfahrenstechnik Gesellschaft Mit Beschränkter Haftung Grabenstr. 8, 4000 Dusseldorf-1 West Germany.	Process for obtaining xylan and fibrin from vegetable raw material containing xylan.
144620	5-4-1977	Pulp & Paper Research Institute, Jaykaypur-765017, Dist-Koraput, Orissa.	A method and a plant for recovering chemicals from black liquor in a pulp mill of 30 to 35 tons per day capacity.
157561	15-1-1982	Rhone Poulen Sante Les Miroirs-18, Boucle D'Alsace-92400 Courbevoie, France.	Process for the preparation of 7-chloro-1, 2, 3-tetrahydroquinolin 4-one.
157731	6-1-1982	Do.	Process for the preparation of quinolin-4-ones.
156603	28-7-1982	R. J. Reynolds Tobacco Company, Main & Fourth Streets, Winston Salem, State of North Carolina 27101, U.S.A.	Improved smoking tobacco product and Process for improving the flavour or aroma of such product.
155056	14-4-1981	Rollan Swanson 100 Wall Street, New York-10005, U.S.A.	Process for hydrotreating carbonaceous materials.
154117	23-6-1981	Ruth A. Robinson, 807 South Warson Road, St. Louis, Missouri, U.S.A.	A method of making cut plant material preservatives and storage stable.
152053	21-2-1979	Santanu Roy 13, Nanda Kumar, Choudhury Lane, Calcutta-700006, India.	A process for manufacturing a polymeric foam.
156896	7-6-1982	Do.	A process for the manufacture of bitumen polymeric elastomers.
151254	21-12-1978	Sasol One (Proprietary) Ltd., Klaisie Havenga Road, Sasolburg Organic Free State, Republic of South Africa.	Process for liquification.
154955	5-2-1982	Schering Corporation 2000, Galloping Hill Road, Kenilworth, New Jersey 07033, U.S.A.	Process for the preparation of 1, 4 pregnadien derivative.
154169	13-8-1981	Scott Bader Co. Ltd., Willaston Wellingborough, Northam.	Anti-fouling coating compositions.
140976	14-9-1975	Shell Internationale Research Maatschappij B. V. Carel Van Bylandtlaan 30, The Hague, The Netherlands.	A process for the preparation of synthesis gas.

1	2	3	4
143184	8-10-1976	Shell Internationale Research Maatschappij B.V., Carel Van Bylandlaan 30, The Hague, The Netherlands.	Process for the separation of dry particulate matter from a hot gas.
143192	22-10-1974	Do.	A process for the preparation of silver catalysts for the production of ethylene oxide.
143501	2-5-1975	Do.	A process and apparatus for producing a fuel gas by partially combusting a fuel that contains ash and yields a hot product gas containing sticky particles.
143563	22-10-1974	Do.	Process for the production of ethylene oxide.
143710	14-6-1976	Do.	A process for the dehydrogenation of hydrocarbon with the aid of an iron containing catalyst.
143874	18-1-1977	Do.	Process and apparatus for the preparation of Dewatered carbonaceous particles.
148085	14-3-1978	Do.	Process for the partial combustion of finely divided solid carbonaceous fuel and reactor for carrying out the same.
150951	24-3-1980	Do.	Process for the preparation of hydrocarbons.
151797	29-10-1979	Do.	Process and equipment for the oxidation of soot obtained in the preparation of a gas mixture containing hydrogen and carbon monoxide.
152405	20-12-1979	Do.	Improvements in or relating to a process for regenerating solvents used in acid gas removal.
152671	2-4-1980	Do.	Process and burner for the gasification of solid fuel.
153718	1-7-1980	Do.	Process for the preparation of hydrocarbon mixture.
153737	27-1-1981	Do.	A process for the preparation of hydrocarbon mixture from a mixture of carbon monoxide and hydrogen.
154191	26-3-1981	Do.	A process for the preparation hydrocarbons.
154530	1-4-1981	Do.	A process for the synthesis of middle distillates of Petroleum.
155483	14-10-1981	Do.	A process for preparation of oxygen-containing organic compounds and paraffinic hydrocarbons.
155501	3-11-1981	Do.	Removal of hydrogen sulphide and carbonyl sulfide from gaseous mixtures.
155631	24-5-1982	Do.	Process for the removal of H ₂ S from a sour gaseous stream.
155955	30-9-1980	Do.	Process for the partial combustion of solid particulate fuel for the production of fuel gas and burner for carrying out the process.
156059	23-3-1977	Do.	Process for preparing modified silver catalysts for the manufacture of ethylene oxide.
156108	3-5-1982	Do.	Process for the removal of H ₂ S and CO ₂ from gaseous streams optionally comprising hydrocarbons.
156182	2-1-1982	Do.	A process and apparatus for the preparation of cooled and purified gas from a hot gas.

1	2	3	4
156408	14-6-1982	Shell Internationale Research Maatschappij B. V. Carel Van Bylandlaan 30, The Hague, The Netherlands.	Process for the removal of CO ₂ and if present H ₂ S from a gas mixture.
156826	11-5-1982	Do.	Process for the removal of CO ₂ , H ₂ S and COS from gaseous streams.
156851	22-12-1981	Do.	Improvements in a column and a method for removing vinyl chloride from an aqueous slurry of poly-vinyl chloride particles.
156920	24-5-1982	Do.	Sulphur recovery Process.
157514	14-6-1982	Do.	Process for the removal of H ₂ S and CO ₂ from a gas mixture.
157810	26-10-1981	Do.	A process for the preparation of paraffinic and olefinic hydrocarbons.
158141	9-2-1983	Do.	A process for the separation of a liquid mixture by extraction.
146044	1-4-1977	Shin-Etsu Chemical Co. Ltd., 6-1, Otemachi 2-chome, Chiyoda-ku, Tokyo, Japan.	Method for removing unreacted monomer from the aqueous disperation of polymeri- zate of vinyl chloride.
147427	21-1-1978	Do.	Improved method for the polymerization of vinyl monomers.
149987	22-7-1978	Do.	An improved method for the polymerization of vinyl chloride monomer.
151895	14-10-1980	Do.	Method for the preparation of vinyl chloride resins by suspension polymerisation.
153574	24-7-1980	Do.	Improvement in the polymerization process of vinyl chloride.
156957	13-9-1982	Do.	A vertical type polymerization reactor.
157650	23-3-1982	Do.	Improvement in or relating to polymerization of an ethylenically unsaturated polymerizable monomer.
144034	10-9-1975	Showa Denko K.K., 13-9 Shiba Daimon 1-Chome, Minato, Ku, Tokyo, Japan.	Method for manufacture of reduced pellets for use in metal refinement from mineral ore.
147145	5-12-1977	Do.	Process for preparing a ferrochromium by using a blast furnace.
147588	3-1-1978	Siemens A.G, Berlin & Munich, West Germany	A polymer stabiliser composition.
153721	29-7-1980	Do.	A stabilized composition of an organic material.
153276	28-11-1980	SKF Steel Engineering Aktiebolag, P.O Box. 202, S-813 00 Hofors, Sweden.	A method for producing liquid iron from iron oxides.
155076	11-5-1981	Do.	A method of manufacturing ferromanganese in a shaft furnace.
156382	29-10-1982	Do.	Method and plant for gasifying carbona- ceous material.
157068	30-11-1981	Do.	Method and device for the manufacture of a gas substantially containing carbon mo- noxide and hydrogen gas etc.
156972	12-7-1982	Do.	Method and plant for conversion of waste material to stable final products.
143294	19-5-1975	Snamprogetti Sp.A, Corso Venezia 16, Milan, Italy.	Production of alkyl tertiary butyl ethers.
143295	19-5-1975	Do.	Process of producing tertiary alkyl ethers.
151193	19-3-1979	Societe Des Electrodes Et Refractories Savole (SERS) 12, Rue de General Foy, 75008, Paris, France.	A process for preparing paste.

1	2	3	4
147742	24-5-1978	Societe Franchise D'Electrometallurgie Sofrem, Rue General Foy, Paris 75361, Cedex 08, France.	Improvements relating to thermal processes for the production of magnesium.
152626	24-4-1980	Do.	A process for desulfurizing caste iron, pig iron & steels.
154193	10-11-1981	Do.	Process for the production of low-carbon ferrochromium in a reactor.
152432	10-3-1980	Societe Miniere Et Metallurgique De Penarroys S.A. Tour Maine Montparnasse 33, Avenue Du Maine 75751 Paris Cedex 15, France.	Process for obtaining a granular lead additive capable of being used inter alia in the glass industry.
143034	8-4-1976	Solvay & Cie, 33 Rue du Prince Albert, B-1050 Brussels, Belgium.	Process for the polymerization of olefins.
152254	10-8-1979	Stamicarbon B.V. P.O. Box 10, Geleen, The Netherlands.	Method for the direct reduction of iron using gas from coal.
152524	4-6-1980	Do.	Process for the preparation of filaments of high modulus and tensile strength.
152757	1-4-1980	Do.	Process for the preparation of a catalytic titanium component.
152912	9-5-1980	Do.	Process for treating urea containing waste water for recovering NH ₃ and CO ₂ there- from and utilising said process in the process for preparing melamine.
154019	26-4-1980	Do.	Thermosetting powder based on a unsatura- ted polyester resin and process for preparing the same.
154475	22-7-1981	Do.	Process for the preparation of copolymers of ethylene with atleast one other 1-alkene.
154476	22-7-1981	Do.	Process for the preparation of copolymers of ethylene with atleast one other 1-alkene.
154655	26-3-1981	Do.	Production of polyamide-based objects and objects so produced.
154656	26-3-1981	Do.	Preparation of polytetramethylene adipamide.
154657	26-3-1981	Do.	Preparation of high molecular polytetra- methylene adipamide.
154820	7-5-1981	Do.	Process for the preparation of a supported chromium oxide type catalyst for the poly- merization of olefins.
155281	13-10-1982	Stamicarbon B.V. P.O. Box 10, Geleen,, The Netherlands.	Process for making polytetramethylene adi- pamide.
155613	5-5-1982	Do.	Process for the purification of E-caprolactum.
156771	1-4-1980	Do.	Process for the polymerization of alkenes-1 and for the copolymerization of alkenes-1 with each other or with ethylene.
156790	23-4-1983	Do.	Process for preparing cyclohexanol and cyc- lohexanone.
158001	28-6-1982	Do.	Process and device for the preparation of polymer melts which are substantially free of volatile components.
158211	3-3-1983	Do.	An improved process for preparing melamine.
158343	16-10-1982	Do.	Process for the production of polymer fila- ments having high tensile strength and mo- dulus.
154002	3-4-1980	Sulzers Brothers Ltd., CH-8401, Winterthur, Switzerland.	A method of producing very pure mag- nesiumoxide.

1	2	3	4
152953	20-6-1980	Sumitomo Metal Industries Ltd., 15, 5-chome, kitahama, Higashi-Ku, Osaka-Shi, Osaka, Japan.	Production of carbon steel and low alloy steel with bottom blowing basic oxygen furnace.
155065	14-7-1981	Surgikos Inc. 501 George Street, New Brunswick, New Jersey 08903, USA.	A process for preparing a sporicidal composition.
156506	28-12-1982	Takasago Perfumery Co. Ltd., No. 19-22, Takanawa 3-Chome, Minato-ku, Tokyo, Japan.	Process for the preparation of enamines.
144985	23-11-1976	Texaco Development Corporation, 135 East, 42nd Street, New York, 10017, U.S.A.	Fluidized cracking catalyst regeneration process and apparatus.
146932	8-9-1977	Do.	Production of cleaned and purified synthesis gas and carbon monoxide.
142240	7-10-1974	The Board of the Rubber Research Institute of Malaysia., 260 Jalan Ampang, Kaula Lumpur, Malaysia.	Treatment of rubber.
142291	4-6-1974	Do.	Treatment of natural rubber.
144217	11-8-1975	Do.	Coagulation of rubber latex.
144372	30-9-1978	Do.	Non-aqueous composition for stimulating the yield of rubber latex from Hevea brasiliensis.
157027	8-4-1983	The Coca-Cola Company 310, North Avenue, Atlanta, Georgia 30301, U.S.A.	The process for the preparation of soymilk.
150813	8-11-1979	The fertilizer (Planning & Development) India Ltd., P.O. Sindri, Dhanbad, Bihar.	Improvement in or relating to process for the manufacture of concentrated phosphoric acid from rock phosphate.
151306	29-8-1979	Do.	Process for the production of high analysis watersoluble nitro phosphate fertilizer.
153735	22-1-1981	Do.	Improved process for the production of NP/NPK fertilizers with by-product gypsum with good filtration properties.
141782	30-11-1976	The Tata Iron & Steel Co. Ltd., Jamshedpur, Bihar, India.	Recovery of iron values from waste pickle liquor.
151681	13-2-1980	Do.	Process for the production of iron from iron ore in a blast furnace.
145599	3-1-1977	Toth Aluminium Corporation, 5010 Leroy Johnson Drive, New Orleans, Louisiana, USA.	Improved ore halogenation process.
149837	21-1-1977	Do.	Improvements in or relating to process of carbochlorinating kaolinitic ore to produce aluminium chloride.
150671	21-7-1977	Do.	Improvement in or relating to process of carbochlorinating kaolinitic ore to produce aluminium chloride.
149972	12-12-1980	Ube Industries Ltd., 12-32, Nishihonmachi, 1-Chome, Ube-shi, Yamagu hi-ken, Japan.	Process for preparing 5-amino, 1, 2, 3-thiadizole.
148704	9-9-1975	Ugine Acier 10 Rue du General Foy, 75008, Paris, France.	A process for the preparation of free machining steel.
153729	5-12-1980	Do.	A process for the decarburization of chromium containing cast-irons.
153200	1-6-1979	Unie Van Kunststoffabrieken B.V., P.O. Box 45, 3500AA Utrecht, The Netherlands.	Process and device for the production of a product containing ammonium orthophosphate.
153218	8-4-1981	Do.	Process for making urea prills.

1	2	3	4
155331	18-9-1981	Unie Van Kunststofffabrieken B.V., Maliebaan 81, 3581 CG Utrecht, The Netherlands.	Process for the preparation of non-caking and non-dusting urea granules.
156310	18-11-1981	Do.	Process for the removal of urea ammonia and carbon dioxide from dilute aqueous solutions.
156757	17-6-1982	Do.	Process for preparing thermally stable ammonium nitrate-containing granules and granules obtained by this process.
156758	17-6-1982	Do.	Process for preparing thermally stable ammonium nitrate-containing granules of high bulk density and granules obtained by this process.
156951	27-7-1982	Do.	Process for the digestion of phosphate rock with nitric acid and separation of calcium nitrate formed.
156968	12-5-1982	Do.	Improved process for the recovery of ammonia and carbon dioxide from the waste streams obtained in the preparation of urea.
157071	18-2-1982	Do.	Process for the removal of urea, ammonia and carbon dioxide from dilute aqueous solutions containing urea, ammonia and carbon dioxide.
157872	17-9-1982	Do.	Process for the preparation of magnesium nitrate hexahydrate.
142454	22-4-1977	Union Carbide India Ltd., 1, Middleton Street, Calcutta-700 071, W. Bengal, India.	Method for the production of activated manganese dioxide.
154421	28-12-1979	Do.	New method of production of 2-ethylhexoic acid.
144019	30-8-1975	United States Borax & Chemical Corp., 3075 Wilshire Boulevard, Los Angeles, California, U.S.A.	A process for the fluid bed dehydration of borax.
152274	17-10-1979	Do.	Froth flotation process for zinc sulphide.
149510	10-7-1978	Voest-Alpine AG, A-1011 Vienna, Friedrichstrasse 4, Austria.	Process of treating sponge iron for protection against reoxidation and apparatus for carrying out the process.
153585	17-8-1981	Do.	Process for treating iron-sponge.
153854	28-5-1981	Do.	Process for producing high grade iron sponge particles for smelting plants.
152676	28-4-1980	Westinghouse Electric Corporation, Westinghouse Bldg., Gateway Center, Pittsburgh, Pennsylvania 15222, U.S.A.	A method for preparing an electrostatic powder coating composition.
152814	27-7-1979	Do.	A method of preparing a clear solution of a metal alkoxide.
154902	21-10-1981	Do.	Process for preparing fluid polyester insulating compositions.
155228	19-3-1981	Do.	Sprayable solventless adhesive-bracing compositions and method of preparing the same.
156384	27-7-1979	Do.	A method of preparing an oxide coating on a substrate.
144150	10-10-1975	Zaklady-Azotowe I.M.F. Dzierzynskiego, Tarnow ul. Lipowa, 33-101, Tarnow, Poland.	A method for oxidation of hydrocarbons in the liquid phase under pressure of oxygen containing gases preventing disturbances and/or effects of disturbances in the reaction system.
157218	22-2-1983	Zyma SA, Route de l'Etaz, 1260 Nyon, Switzerland.	Process for the production of (L)-Catechol monohydrate.

RENEWAL FEES PAID

143481	143784	143973	144715	145064	145245	145246
145260	145476	145590	145776	145890	146017	146445
146503	147062	147189	147270	147395	147442	148086
148586	148710	149034	149045	149066	149385	149471
149493	149540	149545	149659	150129	150596	150619
150834	151049	151406	151428	151937	152093	152124
152320	153201	153469	153641	153701	153954	154107
154108	154456	154742	154892	154939	155363	155579
155749	155839	156079	156137	156332	157021	157182
157219	157293	157332	157451	157634	167650	157659
157686	157689	157975	158048	158213	158338	158361
15838J	158493	158610	158642	158710	158723	159224
159226	159241	159243	159266	159520	159521	159524
159640	159691	159706	159804	159873	159878	159915
160087	160132	160136	160224	160303	160492	160713
160897	160984	161090	161300	161331	161532	161537
161626	161636	161654	161683	161872	161900	161919
162047	162058	162146	162154	162221	162238	162275
162391	162429	162489	162784	162786	162789	162790
162791	162794	162795	162797	162798	162800	162814
162817	162818	162819	162903	162910	162924	163025
163026	163027	163028	163029	163030	163046	163047
163050.						

CESSION OF PATENTS

147254	147256	147258	147260	147263	147265	147269
147273	147274	147275	147276	147278	147279	147280
147281	147284	147285	147287	147288	147289	147290
147293	147296	147298	147301	147302	147303	147305
147311	147312	147313	147314	147322	147325	147326
147328	147329	147331	147332	147333	147334	147337
147338	147339	147340	147341	147342	147345	147346
147348	147349	147351	147353	147355	147356	147359
147360	147361	147363	147364	147366	147368	147369
147371	147374	147376	147377	147378	147379	147381
147382	147383	147384	147385	147390	147391	147392
147393	147396	147397	147398	147399	147400	147402
147403	147408	147410	147413	147415	147416	147417
147420	147421	147425	147426	147432	147433	147435
147436	147437	147440	147441	147443	147444	147447
147450	147451	147452	147453	147454	147455	147457
147460	147461	147462	147464	147465	147468	147477
147478	147479	147484	147486	147491	147492	147494
147495	147499	147500	147501	147502	147503	147504
147505	147506.					

COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed along with the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

"The classifications given below in respect of each specification are according to Indian Classification and International Classification."

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied

by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying charges per page are Rs. 4/-.

CLASS : 70B

164471

Int. Cl. : G 01 n 27/30.

A HYDROGEN STORAGE ELECTRODE FOR AN ALKALINE HYDROGEN STORAGE ELECTROCHEMICAL CELL AND AN ALKALINE HYDROGEN STORAGE ELECTROCHEMICAL CELL COMPRISING SAID ELECTRODE.

Applicant : ENERGY CONVERSION DEVICES, INC., OF 1675 WEST MAPLE ROAD, TROY, MICHIGAN-48084, U.S.A.

Inventor : 1. JOHN EDWARD KEEM, 2. RICHARD CHARLES BERGERON, 3. RUSSELL CRAIG CUSTER, 4. RALPH WILLIAM MCCALLUM.

Application No. 755/Cal/84 filed October 29, 1984.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Calcutta.

7 Claims

A hydrogen storage electrode for an alkaline hydrogen storage electrochemical cell comprising :

at least one solid, metallic, amorphous electrochemically active body obtained by rapid solidification from a melt as hereafter defined, to form a non-particle, dimensionally anisotropic shape with a continuous amorphous structure throughout, the melt for said body having a composition comprising at least three elements being titanium, nickel and at least one element selected from the group consisting of aluminium, boron, cobalt, hafnium, indium, lead, magnesium, molybdenum, niobium, palladium, tin, zirconium and rare earth metals, each of said elements present in a predetermined amount so that said electrode is capable of being electro-chemically charged with hydrogen to store energy and capable of electrochemically discharging hydrogen and releasing energy, while maintaining its structural integrity during electrochemical charge and discharge cycles, said body further comprising a surface for operative contact with an electrolyte;

said surface having a coating thereon for increasing the rate of exchange of electrons between said surface and the remainder of material of said active body having an uncoated surface, said coating comprising at least one element selected from the group consisting of nickel, palladium and titanium.

Compl. specn. 29 pages

Drg. 1 sheets

CLASS :

164472

Int. Cl. : F 02 d 41/00.

AN ENGINE CONTROL SYSTEM.

Applicant : KAWASAKI JUKOGYO KABUSHIKI KAISHA, OF 1-1, HIGASHIKAWASAKI-CHO 3 CHOME, CHUO-KU, KOBE, JAPAN.

Inventor : KAZUHITO YOSHIDA.

Application No. 37/Cal/86 filed January 20, 1986.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Calcutta.

5 Claims

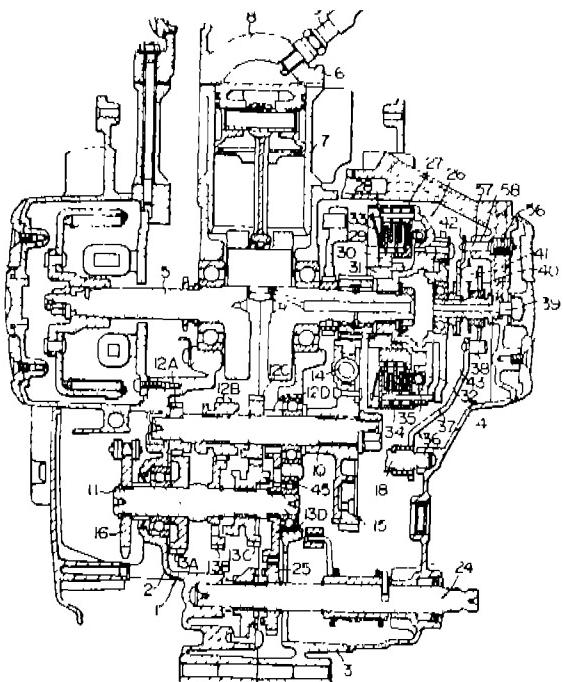
An engine control system comprising:

an ignition circuit for igniting an engine;

a first switching circuit operated in accordance with the operating conditions of a clutch coupled to the output of the engine;

a second switching circuit operated when the engine speed exceeds a predetermined value; and

means connected to said first and second switching circuits for de-activating said ignition circuit only when the clutch is turned off with the engine speed exceeding a predetermined level in accordance with the operating conditions of the first and second switching circuits.



Compl. specn. 16 pages

Drg. 4 sheets

CLASS : 166 Ci

164473

Int. Cl. 4 B 63 b 35/28.

ARTICULATED BARGE FOR TOWING AND LAUNCHING OFFSHORE STRUCTURES.

Applicant : McDERMOTT INTERNATIONAL, OF 1010
COMMON STREET, P.O. BOX 60035, NEW ORLEANS,
LA 70160 U.S.A.

Inventor : 1. NICO DE BOER, 2. STAFFORD JOSEPH MENARD.

Application No. 62 /Cal/86 filed January 28, 1986.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Calcutta.

12 Claims

An articulated barge for towing and launching elongated structures comprising:

a first elongated barge having a first mating region and a relatively flat planar deck;

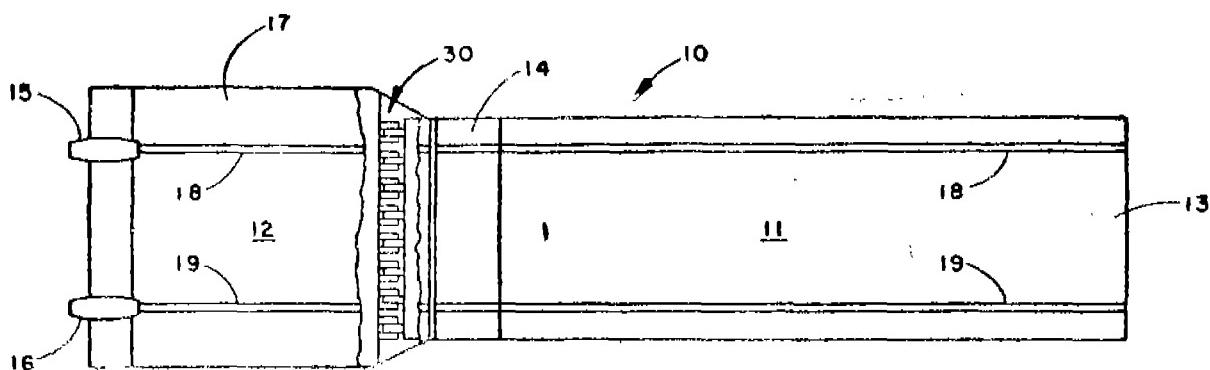
a second elongated barge having a second mating region configured to mate with said first mating region and having a relatively flat planar deck;

connecting means for pivotally connecting said first and second mating regions;

a longitudinal skidway secured to said decks of said first and second barges;

a support member pivotally secured to said second barge opposite said second mating region, said support member being in longitudinal alignment with said skidway; and

jacking means for jacking said elongated structure with respect to said articulated barge whereby said second barge is pivotal with respect to said first barge and said support member is pivotal with respect to said second barge.



Compl. specn. 14 pages

Drg. 4 sheets

CLASS :

164474

ing or positive pushing-in device (36, 48 to 52, 55 to 59, 62 to 65).

Int. Cl. : C 07 c 143/00.

IMPROVED PROCESS FOR THE MANUFACTURE OF THIOPHTHALIMIDE DERIVATIVES.

Applicant : IEL LIMITED, OF ICI HOUSE, 34, CHOWRINGHEE ROAD, CALCUTTA-700 071, WEST BENGAL, INDIA.

Inventor : RAMASWAMY GOPALAN.

Application No. 91/Cal/86 filed on February 7, 1986.

Complete Specification left on May 01, 1987.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Calcutta.

8 Claims

Process for the preparation of thiophthalimide derivatives which comprises reacting a mercaptan or disulphide in a halogenated solvent to produce sulphenyl chloride and thereafter condensing the sulphenyl chloride so produced with phthalimide in the same solvent in the presence of an inorganic acid-trapping agent of the kind described herein to produce the desired thiophthalide derivatives.

Provisional specn. 7 pages

Drg. Nil

Compl. specn. 9 pages

Drg. Nil

CLASS : 83B_c & 99E

164475

Int. Cl. : A 01 f 25/00.

APPARATUS FOR DISCHARGING BULK MATERIAL FROM SILOS.

Applicant : GUSTAV SCHADE MASCHINENFABRIK GMBH & CO., OF AM ROSENPLATZCHEN 120, D-4600 DORTMUND 1, FEDERAL REPUBLIC OF GERMANY.

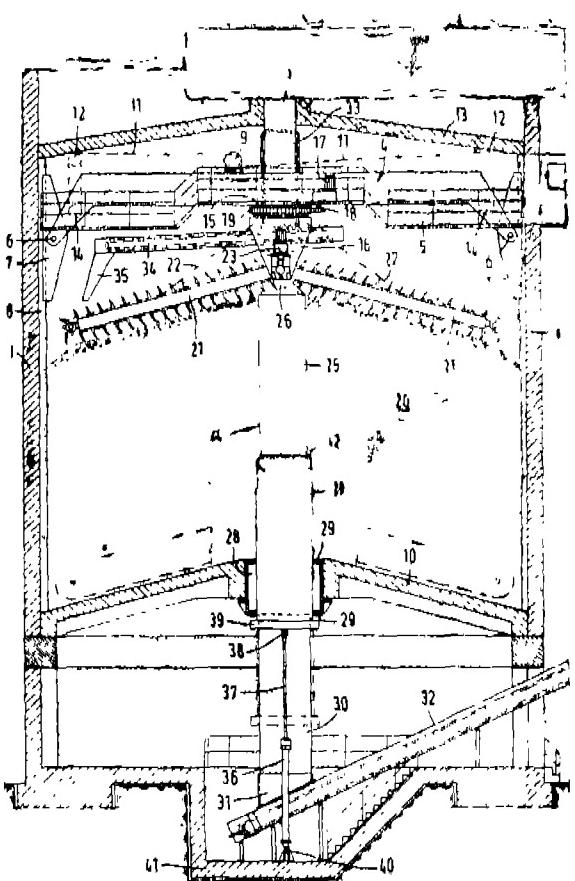
Inventor : 1. GERHARD FISCHER, 2. GUNTER STROCKER.

Application No. 330/Cal/1986 filed April 28, 1986.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Calcutta.

20 Claims

Apparatus for discharging bulk material from silos, with a clearing device which removes the bulk material on the surface of the heap of bulk material and can be raised and lowered in the silo and which supplies the bulk material to a telescopic gravity tube extending vertically through the silo and coupled to the clearing device so that, by being pushed in and out telescopically it follows the stroke movements of the clearing device, the telescopic gravity tube having an upper coupling tube coupled to the clearing device, with a bulk-material inflow, and at least one sliding tube following the coupling tube downwards towards the silo bottom, characterized by a crash prevention means assigned to the sliding tube (27, 27') and in the form of a restraint



Compl. specn. 29 pages

Drg. 5 sheets

CLASS : 128 K

164476

Int. Cl. : A 61 b 17/42.

SURGICAL COMBINATION INSTRUMENTS.

Applicant : DR. MED. ALFRED TISCHER, OF POTSDAMER STR. 105, D-1000, BERLIN 30, WEST GERMANY.

Inventor : DR. MED. ALFRED TISCHER.

Application No. 519/Cal/86 filed July 11, 1986.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Calcutta.

6 Claims

A surgical combination instrument, comprising :

means for altraumatically grasping human or animal tissue;

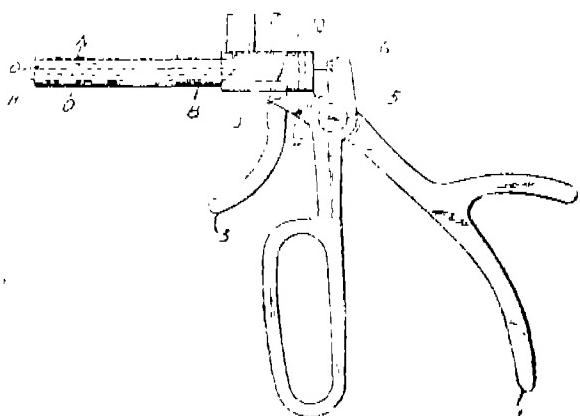
said grasping means comprising first and second grasping members said second grasping member connected and pivotally movable relative to said first grasping member between an open and aclosed position of said grasping means;

said grasping members defining central openings aligned with one another when said grasping means is in said closed position;

said first and second grasping members electrically insulated from one another and forming electrodes for high frequency current to be utilized for bipolar coagulation of the tissue grasped by said grasping means,

cutting means attached and movable relative to said first grasping member in said central opening thereof for cutting the essentially non-coagulated portion of tissue extending across said aligned openings of said grasping means and

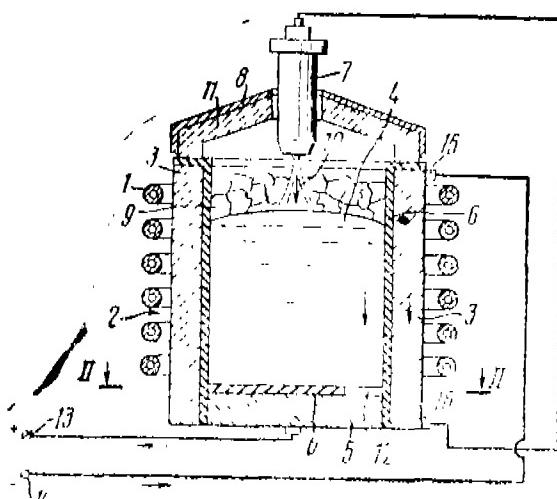
holding means forming part of said first grasping member for catching the tissue portion cut by said cutting means



Compl. specn. 14 pages

Drg. 1 sheet

generator (7) so that the direction of current of an arc (10) of the plasma generator (7) in coincident with or opposite to the direction of current of the section (3, 20) of the crucible (2, 18).



Compl. specn. 20 pages

Drg. 4 sheets

CLASS : 97A & E

164477

Int. Cl. : H 05 b 7/00; H 05 h 1/26, 1/16.

INDUCTION-PLASMA FURNACE.

Applicant : VSESOJUZNY NAUCHNO-ISSLEDHOVATELSKY, PROEKTNOKONSTRUKTORSKY I TEKHNOLOGICHESKY INSTITUT ELEKTROTERMICHSKOGO OBORUDOVANIA, OF NIZHEGOROSKAYA ULITSA, 29, MOSCOW, USSR.

Inventor : 1. NIKOLAI IVANOVICH FOMIN, 2. MIKHAIL PETROVICH CHAIKIN, 3. VLADIMIR SERGEEVICH MALINOVSKY.

Application No. 554/Cal/86 filed July 22, 1986.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Calcutta.

1 Claim:

An induction-plasma furnace comprising an induction heater (1, 19) accommodating a melting crucible (2, 18) having a side wall of the cylindrical shape and an electric arc plasma generator (7) an electric circuit of which is completed through a melt (4) contained in the crucible (2, 18) characterized in that the side wall of the crucible (2, 18) is formed by vertically arranged sections (3, 20) made of a current conducting material and electrically insulated from one another, and at least one of which is connected in series with the electric circuit of the plasma

CLASS : 164478

Int. Cl. : A 23 n 5, 00, B 26 d 1/00.

DEVICE FOR SCRAPING KERNELS OF COCONUTS AND A MIXING MACHINE HAVING SAID DEVICE.

Applicant & Inventor : SARWESWARA SOMAYAJULU YECHURY, OF 214/2 ACHARYA JAGDISH BOSE ROAD, CALCUTTA-700017. WEST BENGAL, INDIA.

Application No. 760/Cal/86 filed on October 17, 1986.

Complete Specification left on January 18, 1988.

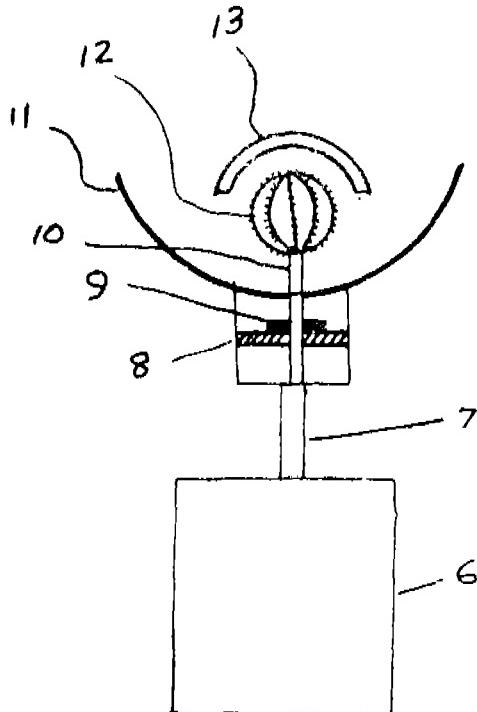
Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972) Patent Office, Calcutta.

6 Claims

A device for scraping kernels of coconuts in the form of a cutter of scraping attachment for a mixing machine or domestic mixer or mixie comprising a hemispherical bowl 11 shaped body having a co-axial bearing extending downwardly, a rotatable shaft supported in the bearing and having coupling means at its lower end for securing it to the upper end of the staff of the electric motor of the machine and a cutter of scraper consisting of equally spaced six to eight blades fixed to the upper end of the shaft, each blade being semicircular in shape and having serrations or teeth on its curved side, and a regulator device for

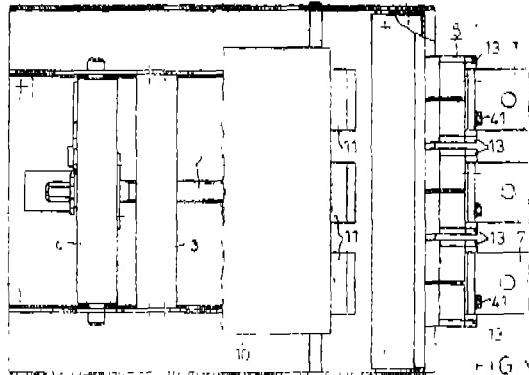
reducing the speed and increasing the speed of the motor of said mixing machine.

tact devices being capable of limited movement to adjust themselves to the positions of said conductor pieces.



Provisional specn. 6 pages
Compl. specn. 10 pages

Drg. Nil
Drg. 1 sheet



Compl. specn. 14 pages

Drg. 3 sheets

CLASS I

164480

Int. Cl. : A 23 f 3/00.

COMPACT CTC MACHINE UNIT.

Applicant : TRADE & INDUSTRY PRIVATE LIMITED,
AT 19, R. N. MUKHERJEE ROAD, CALCUTTA-700 001,
WEST BENGAL, INDIA.

Inventors : 1. OM PRAKASH BAGARIA, 2. CHIT MENG KHOMG.

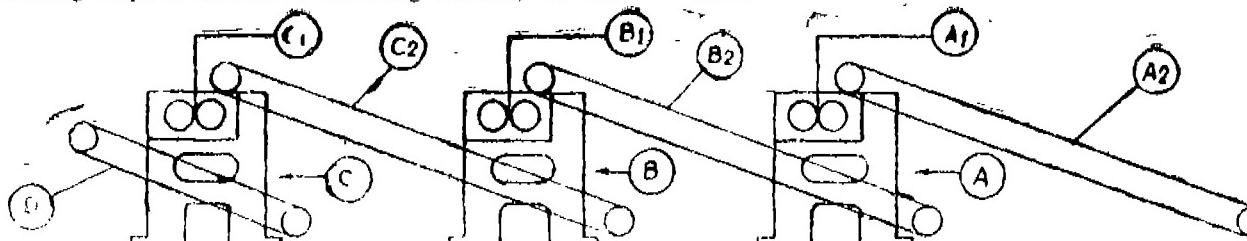
Application No. 251/Cal/87 filed March 30, 1987.

Complete Specification left on May 02, 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

5 Claims

A compact CTC machine unit having more than one set of roller pairs, each said pair of rollers being in meshing relation with each other and being provided with dents/ridges for the purpose of processing of tea leaves, characterised in that the said sets of roller pairs are housed in a common frame and are so disposed in relation to each other as to constitute a cascading arrangement, and that a continuous leaf-carrying movable surface is provided, whereby the tea leaves are adapted to be fed to each of said sets of roller pairs one after another, and are also adapted to be discharged after being processed by the last set of said roller pairs, and further that all the sets of roller pairs are adapted to be driven by a common drive source



Prov Spec. 7 pages

Compl spec 9 pages

100 1 51051

Dr. Nil

CLASS : 164481
Int. Cl.⁴ : E05 B. 33/00; 47/06; 63/00.

"A CONTROL MECHANISM TO CONTROL THE WORKING OF AN ASSOCIATED MECHANISM OR DEVICE".

Applicant : INSTRUMENTS & COMPONENTS, OF BLOCK NO. 5, DEV NAGAR, KAROL BAGH, NEW DFI HII-110 005, INDIA, AN INDIAN FIRM.

Inventor : NETRA PAL JAIN.

Application for Patent No. 375/Del/84 filed on 1st May, 1984.

Complete Specification left on 1st August, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patents Office Branch, New Delhi-110005.

2 Claims

A control mechanism to control the working of an associated mechanism or device such as door lock comprising :

a drive and a driven member;

a pawl provided in said drive member co-operating with pins provided in said driven member such that an actuation of the drive member results in an actuation of the driven member, one of said members having only a linear movement, the other of said member having purely a rotational movement;

characterized in that said drive member consists of a slide with a pawl pivotally mounted thereon;

a locking finger provided with said slide and engageable in a hole or holes provided in said driven member.

Provisional specification 6 pages.

Compl. specn. 9 pages

Drg. 1 sheet

Class : 164482
Int. Class⁴ : COIG 23/04.

"A METHOD OF PREPARING A FILLED POLYMERIC COMPOSITION".

Applicant :—KENRICH PETROCHEMICALS, INC., a corporation organised under the laws of the State of Delaware, United States of America, whose post office address is the Foot of East 22nd Street, Bayonne, New Jersey, 07002, United States of America.

Inventors:—SALVATORE JOSEPH MONTE & GERALD SUGERMAN.

Application—for patent No. 415/Del/84 filed on 18th May, 1984. Ante-dated to 19th August, 1980.

Divisional to application No. 605/Del/80 filed on 19th August, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patents Office Branch, New Delhi-110005.

3 Claims

A method for preparing a filled polymeric composition which comprises admixing a polymeric material such as herein described with an inorganic solid such as herein described, any conventional filler and a titanate of the general Formula

1. $X_c Ti [OP(O)(OR^1)OP(O)(OR^2)(OR^3)]_d$

wherein C is 1 or 2; d is 0, 1 or 2, e is 0, 1 or 2, with the proviso that d plus e must be 1 or 2; with the proviso that if C

is 1, X must be RO-; and with the proviso that when C is 2, X is either RO- or a group which taken together with the Ti to which it is attached forms a ring having the formula VI shown in the accompanying drawings wherein each of f, g, h, and i is 0 or 1, with the proviso that at least one of g, h, and i is 1 and that the sum of f, g, h, and i is 2 or 3, and wherein each R is independently selected from C₁ to C₁₀ alkyl, C₃ of C₁₀ alkenyl, C₇ to C₁₀ dioxyalkylene; R₁, R₂, R₄ R₇, each R¹⁰ and each R¹¹ are independently selected from hydrogen, C₆ to C₁₀ aryl, C₇ to C₂₀ aralkyl, C₁ to C₂₀ alkyl, C₃ to C₂₀ alkenyl, C₂ to C₂₀ oxyalkylene and C₃ to C₂₀ oligooxyalkylene, with the proviso that one and only one of R¹ and R² is hydrogen; R⁵, R⁶, R⁸ and R⁹ are independently selected from the same groups as are R₁, R₂, R₄, R₇, each R¹⁰ and each R¹¹, except that R⁵, R⁶, R⁸ and R⁹ may not be hydrogen, and in addition, R⁵ and R⁶ are independently selected from C₁ to C₁₀ alkanol, C₂ to C₆ alkadio, C₇ to C₁₀ aralkanol, substituted and unsubstituted C₁ to C₁₀ alkyl, substituted and unsubstituted C₃ to C₁₀ aralkyl, these last four groups being optionally substituted with 1 to 3 carboxylate groups or from 1 to 3 carboxamide groups, each such carboxylate group and each such carboxamide group being saturated or unsaturated and having from 1 to 5 carbon atoms; with the proviso that when aromatic carbons are present in any one of R, R₂, R₄, R₇, R¹⁰ or R¹¹, each of said carbons is optionally substituted with 1 or 2 independently selected halogen atoms.

The product of the invention useful in controlling the viscosity, flow and the conductivity of many filled resins.

(Complete Specification 32 pages

Drawing 1 sheet)

CLASS : 164483
Int. Cl.⁴ : B 01 J 23/18

"A SINGLE SLURRY PROCESS FOR PRODUCING A FLUID-BED CATALYST."

Applicant : THE STANDARD OIL COMPANY, AN OHIO CORPORATION, HAVING A PLACE OF BUSINESS AT MIDLAND BUILDING, CLEVELAND, OHIO-44115, UNITED STATES OF AMERICA.

Inventors : ROBERT KARL GRASSELLI, DEV DHANARAJ SURESH, ROBERT JOSEPH ZAGATA AND GRAY EDWARD FORCE.

Application for Patent No. 576/Del/85 filed on 18th July, 1985.

Divisional to Application No. 104/Del/82 filed on 9th February, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patents Office Branch, New Delhi-110005.

2 Claims

A single slurry process for producing a fluid-bed catalyst comprising an antimonate-based oxide complex supported on a catalyst support in which (1) source compounds containing all of the elements of said oxide complex and said support material are combined to form a pre-catalyst slurry, (2) the liquid is removed from said pre-catalyst slurry to form a pre-catalyst, and (3) said pre-catalyst is heated at elevated temperature to form said catalyst, characterised in that the support material combined with said source compounds in step (1) is composed of a catalyst support material sol such as herein described.

Compl. specn. 11 pages.

CLASS 164484
Int. Cl.⁴ : C08C 4/00.

VULCANIZABLE ELASTOMERIC COMPOSITION.

Applicant : THE FIRESTONE TIRE & RUBBER COMPANY, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF OHIO, UNITED STATES OF AMERICA, OF 1200 FIRESTONE PARKWAY, AKRON, STATE OF OHIO 44317, UNITED STATES OF AMERICA.

Inventors : KAY EDWARD LEO GUTIERREZ, RICHARD HAUSCH, WALTER RICHARD.

Application for Patent No. 686/Del/85 filed on 20th August, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

7 Claims

A vulcanizable elastomeric composition comprising guayule rubber and a combination of (a) .01 to 5 parts of at least one (A) paraphenylenediamine and (b) .01 to 5 parts of at least one (B) para (dinitroso-arene) per 100 parts by weight of the guayule rubber as an antioxidant.

Compl. specn. 20 pages

Drg. 1 sheet

CLASS 164485
Int. Cl.⁴ : A61K 7/16.

CHEMICALLY AND PHYSICALLY STABLE ANTIPLAQUE DENTIFRICE COMPOSITION AND A PROCESS FOR PREPARING THE SAME.

Applicant : COLGATE-PALMOLIVE COMPANY, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, OF 300 PARK AVENUE, NEW YORK, NEW YORK 10022, UNITED STATES OF AMERICA.

Inventors : FERLAUTO ROBERT JOSEPH YUHASZ, KATHLEEN MARY.

Application for Patent No. 703/Del/85 filed on 26th August, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

17 Claims

A chemically and physically stable antiplaque dentifrice composition in the form of a combined single gel phase of (i) an oil gel phase comprising a quaternary ammonium compound in an amount of 0.1-1% by weight of the composition, a betaine surfactant in an amount of 3-5% by weight of the composition and a flavour such as herein described constitutes 0.5-2% by weight of the composition; (ii) a water gel phase comprising glycerin and/or sorbitol humectant in an amount of 18-23% by weight of the composition, a nonionic gelling agent such as herein described present in an amount of 0.8-1.5% by weight of the composition and (iii) a dental abrasive such as herein described in an amount of 35-65% by weight of the composition being present either in said water gel phase or in the combined single gel phase.

Compl. specn. 29 pages.

CLASS 164486
Int. Cl.⁴ : F16J 13/00

A PROCESS FOR THE MANUFACTURE OF PRE-CAST LOAD-BEARING MANHOLE USING PLASTICS FIBRE-REINFORCED CONCRETE AND SUCH ASSEMBLY MANUFACTURED BY THE SAID PROCESS.

Applicant & Inventor : OM PARKASH RATRA, B-5, INSTITUTE OF HOTEL MANAGEMENT PUSA, NEW DELHI-110012, NATIONALITY : INDIAN,

Application for Patent No. 771/Del/85 filed on 23rd September, 1985.

Complete Specification left on 17th December, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

6 Claims

A process for the manufacture of precast load-bearing manhole cover assembly having precast slab with integral frame of desired clear opening, and matching manhole cover, using plastics fibre reinforced concrete (PFRC); said process comprising casting of PFRC mix in MS moulds and rims, the MS rim-circular, rectangular, or square, with or without step-forming part of the cast manhole cover, provided with two to steel rods, at suitable locations formed into lifting handles and welded at each end of the MS rim, the cavities and the space around the said lifting handles in the middle of the cover on each sides at the said two locations being provided with plastics cups or rings of appropriate diameter; the rim assembly for the cover, and the said slab with integral frame being filled with PFRC mix together with placement of wide-mesh fabricated net of plastics fibres, in stages during casting, using appropriate moulds; the filled/cast cover and the slab finished, allowed to set and cure.

Compl. specn. 12 pages

Provisional specification 5 pages.

Drg. 4 sheets

164487

CLASS :
Int. Cl.⁴ : C22 B 21/06.

AN IMPROVED PROCESS FOR REFINING OF ALUMINIUM AND ITS ALLOYS.

Applicant : COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH RAFI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : CHITTUR SUBRAMANIAN SIVARAM-KRISHAN, RANJIT KUMAR MAHANTI AND RAJENDRA KUMAR.

Application for Patent No. 280/Del/86 filed on 25th March, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

2 Claims

An improved process for refining of aluminium and its alloys which comprises keeping a chlorine releasing compound such as herein described in a cylindrical porous graphite tube having a closed bottom and open top, the top portion being connected to a nitrogen or any other non-reactive gas source, the said tube extending into a crucible containing liquid aluminium metal or its alloys, passing nitrogen or other non reactive gas through the said chlorine releasing compound contained in the said tube for a period of 3-5 minutes at a flow rate of 3-10 litres/minute so as to enable the controlled release of chlorine and nitrogen mixture into the molten aluminium metal or its alloy.

Compl. specn. 9 pages.

164488

CLASS :
Int. Cl.⁴ : B01J 19/02

AN IMPROVED REACTION VESSEL.

Applicant : UOP INC., A CORPORATION ORGANISED IN THE STATE OF DELAWARE, WITH ITS PRINCIPAL PLACE OF BUSINESS AT TEN UOP PLAZA, ALGONQUIN & MT. PROSPECT ROADS, DES PLAINES, ILLINOIS 60016, UNITED STATES OF AMERICA.

Inventors : WARD DENNIS JOHN.

Application for Patent No. 330/Del/86 filed on 11th April, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patents Office Branch, New Delhi-110005.

3 Claims

An improved reaction vessel having particulate contact material contained in a large plurality of vertical tubes positioned therein, and means permitting ingress of fluid to the upper ends of said contact material containing tubes for the downward flow of a fluid therethrough, said plurality of tubes being located parallel to each other within said vessel and having their ends mounted in upper and lower tube sheets which are mounted adjacent the ends of said vessel and sealed thereto so as to define upper and lower chambers positioned respectively above and below said upper and lower tube sheets through which fluid may flow, characterised in that an upper vertical partition member is mounted in said upper chamber and a lower vertical partition member mounted in said lower chamber, the upper vertical partition member being in at least general vertical alignment with the lower vertical partition member, thereby dividing each of said chambers into isolated compartments which each contain the open ends of a plurality of tubes; said vertical partition member in said lower chamber including a flow port and an extension portion from the first compartment which extends into an adjacent compartment where it surrounds and communicates with the open end of at least one additional tube in said adjacent compartment but is sealed relative to the remainder of the tubes in said adjacent compartment; said at least one additional tube being open and substantially devoid of particulate contact material, thereby permitting fluid passing downwardly under pressure through the contact material containing tubes whose open lower ends are in said first compartment to be forced upwardly through said at least one additional tube, and said into the upper chamber in a compartment portion thereof which vertically overlies said at least one additional tube and adjacent compartment in said lower chamber, from where it can pass downwardly through the plurality of contact material containing tubes whose open lower ends terminate in said adjacent compartment.

Compl. specn. 11 pages

Drg. 1 sheet

CLASS : 164489
Int. Cl. : C21B 13/02.

AN IMPROVED PROCESS FOR THE PRODUCTION OF SPONGE IRON WITH THE SIMULTANEOUS GENERATION OF TOP GAS.

Applicant : VOEST-ALPINE AKTIENGESELLSCHAFT, AN AUSTRIAN COMPANY, OF 5, MULDENSTRASSE, A-4020 LINZ, AUSTRIA.

Inventor : KONSTANTIN MILIONIS.

Application for Patent No. 348/Del/86 filed on 18th April, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

2 Claims

An improved process for the production of sponge iron with the simultaneous generation of top gas during reduction of particulate iron oxide containing materials which comprises feeding particulate iron-oxide-containing material into a shaft furnace, injecting a reformed gas as herein described from a reformer as a reducing gas into said shaft furnace, discharging the directly reduced ferous particles (spong iron) from the shaft furnace and removing the said top gas generated in said shaft furnace and removing the said top gas generated in said shaft furnace and wherein a hydrocarbon containing gas as reducing gas is injected into said shaft furnace, characterised by :

separating in any known manner, a natural gas into first fraction containing low hydrocarbons of

methane and ethane, and second fraction containing higher hydrocarbons of propane, butane and hydrocarbons from pentane to octane.

- conducting said first fraction through said reformer to form reformed gas consisting essentially of hydrogen, carbon monoxide, carbon dioxide and water;
- injecting said reformed gas as reducing gas into said shaft furnace;
- injecting said second fraction directly into said shaft furnace below the reducing zone or into reducing zone of the said shaft furnace;
- discharging by any known method said directly reduced ferous particles (sponge iron) from said shaft furnace;
- removing said top gas from the upper section of said shaft furnace; and
- if desired, cooling or briquetting said directly reduced ferous particles (sponge iron) in a conventional manner.

Compl. specn. 14 pages.

Drgs. 2 sheets.

CLASS : 164490
Int. Cl. : C07C 69/00.

A PROCESS FOR THE PREPARATION OF CARBAMIC ACID (5-BENZOYL-1H BENZIMIDAZOL-2-YL) METHYL ESTER.

Applicant : COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH RAFI MARG, NEW DELHI-110001, INDIA. AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : MAKINENI PANDURANGA RAO, REVANURU VENKATACHALIAH VENKATARAMAM, PAMULA PARTHY SHANTHAN RAO, MALVAY ESHWARA RAO AND UDAY TRIMBAK BHALEROAO.

Application for Patent No. 959/Del/86 filed on 29th October, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

7 Claims

A process for the preparation of carbamic acid (5-benzoyl-1H-benzimidazol-2-yl) methyl ester which comprises (i) adding diethyl sulphate to urea and refluxing to form O-ethyl isourea sulphate (ii) adding methylchloroformate and sodium hydroxide to the reaction mixture simultaneously maintaining the temperature between to 30 to 35°C to form N-methoxy carboxylated O-ethyl isourea (iii) bringing the pH of the reaction mixture of 4-5 followed by adding 4-benzoyl orthophenylene diamine and refluxing the mixture.

Complete specification 5 pages.

CLASS : 164491
Int. Cl. : B65D 8/00

A CONTAINING OF A FOOD OR BEVERAGE PRODUCT.

Applicant : METAL BOX PUBLIC LIMITED COMPANY, A BRITISH COMPANY, OF QUEENS HOUSE, FORBURY ROAD, READING RG 1 3JH, BERKSHIRE, ENGLAND.

Inventors : (1) LEONARD WILLIAM REED, (2) ROBERT MYERS SINCLAIR BARR, (3) DAVID ALAN DICK.

Application No. 182/Mas/85 filed March 12, 1985.

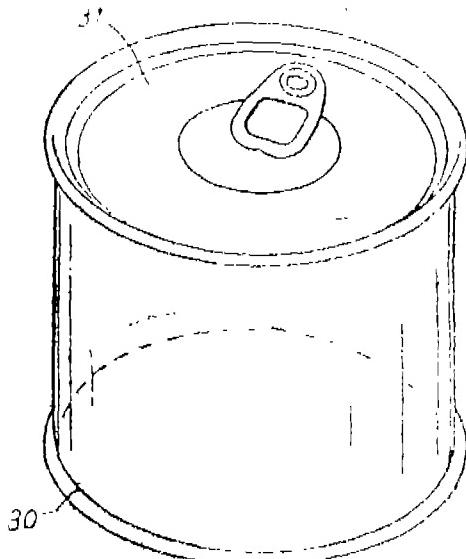
Convention date : November 19, 1980 (No. 8037137; United Kingdom).

Divisional to Patent No. 156443 (1288/Cal/81); Antedated to November 19, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

4 Claims

A container of a food or beverage product, characterised in that it is constructed from a tubular wall portion open at both ends, the dimensions of the open ends being substantially the same as the transverse dimensions of the remainder of the tubular wall portion, that the tubular wall portion is of biaxially oriented thermoplastic material and is transparent, that the container further comprises end closures (30, 31) formed separately from the tubular wall portion but sealingly secured thereto to close its ends.



Compl. specn. 29 pages

Drgs. 7 sheets.

CLASS : 164492
Int. Cl. : H01L 21/28.

A SOLAR CELL AND METHOD OF MANUFACTURING THE SAME.

Applicant : UNISEARCH LIMITED A COMPANY LIMITED BY GUARANTEE AND INCORPORATED UNDER THE LAWS OF THE STATE OF NEW SOUTH WALES OF 221-227 ANZAC PARADE KENSINGTON, NEW SOUTH WALES, COMMONWEALTH OF AUSTRALIA.

Inventor : STUART ROAS WENHAM, MARTIN ANDREW GREEN.

Application No. 228/Mas/85 filed 26th March, 1985.

Convention dated 26-3-84 (No. PG4244; Australia).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

12 Claims

A solar cell comprising semiconductor material of two conductivity types with electrical contact to material of

at least one conductivity type formed by conducting material provided in at least one groove formed in the surface of said solar cell, wherein each said groove extends a distance into said solar cell greater than the average width of each respective groove, and wherein the location and shape of said conducting material is defined by the location and shape of each said groove, and further wherein said conducting material is confined to and substantially fills each said groove such that the conducting material is in intimate contact with the walls of each respective groove.

Compl. specn. 20 pages.

Drgs. 2 sheets.

164493

CLASS :
Int. Cl. : C 07 C 1, 04; 4, 01.

PROCESS FOR THE PREPARATION OF LINEAR C₁₀—C₂₀ OLEFINS.

Applicant : SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B. V. OF CAREL VAN BYANDT-LAAN 30, 2595 THE HAGUE, THE NETHERLANDS, A COMPANY ORGANISED UNDER THE LAWS OF NETHERLANDS.

Inventor : SWAN TIONG SIE.

Application No. 234/Mas/85 filed on March 27, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

9 Claims

Process for the preparation of linear C₁₀—C₂₀ olefins, characterised in that a mixture of carbon monoxide and hydrogen is converted into a mixture of hydrocarbons substantially consisting of linear paraffins by contacting it at a temperature of 175°—225°C and a pressure of 10—75 bar with a catalyst comprising 3—60 pbw of cobalt and 0.1—100 pbw of at least one other metal chosen from the group formed by zirconium, titanium and chromium per 100 pbw of silica alumina, or silica-alumina carrier, which catalyst has been prepared by kneading and/or impregnation, that from the mixture of paraffin thus prepared a fraction is separated which consists substantially of C₂₀⁺ paraffins, and said fraction is converted into a mixture of hydrocarbons which consists substantially of linear olefins and contains the desired C₁₀—C₂₀ olefins by thermal cracking at a temperature of 535°—675°C, a pressure of 1—5 bar abs., a residence time of 0.5—15 seconds and in the presence of a quantity of steam which amounts to almost 40% W, calculated on the hydrocarbon feed.

Compl. specn. 18 pages.

Drg. Nil.

164494

CLASS :
Int. Cl. : G 01 F 3/16.

COMPACT FLOW PROVER, FOR PERIODICALLY CALIBRATING A CONTINUOUS FLOWMETER.

Applicant : SMITH METER INC., A CORPORATION ORGANIZED AND EXISTING ACCORDING TO THE LAWS OF THE STATE OF DELAWARE, OF 1602 WAGNER AVENUE, ERIE, PENNSYLVANIA 16514, UNITED STATES OF AMERICA.

Inventor : CHARLES D ERICKSON.

Application No. 245/Mas/85 filed March 29, 1985.

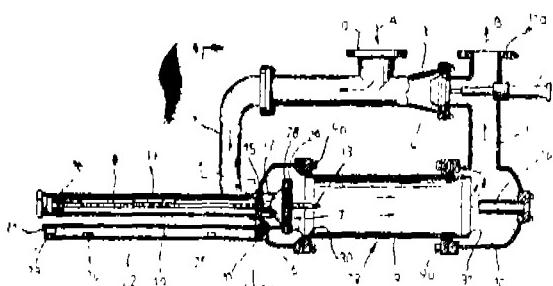
Convention dated : October 26, 1984. (No. 84 27074; United Kingdom).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

8 Claims

A compact flow prover, for periodically calibrating a continuous flowmeter which comprises :

- (a) a fluid inlet conduit;
- (b) a housing comprising :
 - (i) a main cylinder having a substantially uniform inside diameter and inlet and downstream ends;
 - (ii) an inlet section having an inside diameter greater than the inside diameter of said main cylinder, said inlet section being in fluid communication with said inlet conduit and said inlet end of said main cylinder; and
 - (iii) a downstream section having an inside diameter greater than the inside diameter of said main cylinder, said downstream section being in fluid communication with said downstream end of said main cylinder;
- (c) an outlet conduit being in fluid communication with said downstream section;
- (d) a displacer movably disposed within said housing, said displacer having an upstream face, a downstream face, and displacer seal means for forming fluid barrier between said inlet and downstream ends while said displacer is disposed within said main cylinder;
- (e) inlet guide means for limiting radial movement of said displacer while said displacer is disposed within said inlet section;
- (f) downstream guide means for limiting radial movement of said displacer while said displacer is disposed within said downstream section;
- (g) means for detecting longitudinal disposition of said displacer in said housing at predetermined positions;
- (h) means for returning said displacer from said downstream section to said inlet section;
- (i) a bypass conduit being in fluid communication with said inlet conduit and said outlet conduit; and
- (j) a valve positioned in said bypass conduit which can be opened for placing said prover in a displacer return mode or closed for placing said prover in a proving mode.



Compl. specn. 28 pages.

Drgs. 7 sheets.

Int. Cl. : A 61 C 5/00. 164495

AN ARTICLE FOR THE TREATMENT OF PERIODONTAL DISEASE.

Applicant : W. L. GORE & ASSOCIATES, INC., OF 555 PAPER MILL ROAD, P.O. BOX 9329, NEWARK, DELAWARE 19714, U. S. A. A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF STATE OF DELAWARE, U.S.A.

Inventors : (1) TODD VAN NESS SCANTLEBURY, (2) JEANNE BOX AMBRUSTER, (3) STEPHEN EDWARD CAMPBELL.

Application No. 246/Mas/85 filed March 29, 1985.

Complete Specification left : July 8, 1985.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

14 Claims

An article for the treatment of periodontal disease by promoting gingival tissue attachment to the article about a desired sulcus line comprising a member having first and second juxtaposed parts meeting at a boundary wherein said boundary is capable of at least partially incircling the perimeter of a tooth to be treated, said first part comprising a biocompatible porous material such as herein described whose porosity rendered it capable of supporting ingrowth of gingival connective tissue and preventing the apical migration of gingival epithelium and configured so as to surround at least a portion of the perimeter of the tooth just apical to the desired sulcus line, with the porous material abutting the gingival connective tissue, said second part comprising a known biocompatible porous material whose porosity is sufficiently low to render it impermeable to oral tissues and configured so as to surround at least a portion of the perimeter of said tooth apical to the first part so that after healing said first part is exposed to gingival epithelial tissue in the area of the desired sulcus line, and the second part abuts the gingival connective tissue.

Prov. 29 pages.
Compl. specn. 44 pages.

Drgs. 4 sheets.
Drgs. 5 sheets

Int. Cl. : C 07 C 2/12. 164496

A MULTI-STAGE PROCESS FOR PRODUCING HIGH VISCOSITY INDEX LUBRICANT RANGE HYDROCARBONS.

Applicant : MOBIL OIL CORPORATION, A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF NEW YORK, UNITED STATES OF AMERICA, OF 150 EAST 42ND STREET, NEW YORK, NEW YORK 10017, UNITED STATES OF AMERICA.

Inventor(s) : CATHERINE SHUIHUA HSIA CHEN.

Application No. 248/Mas/85 filed on March 30, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

8 Claims

A multi-stage process for producing high viscosity index lubricant range hydrocarbons by oligomerizing lower olefin feed comprising $C_2 - C_8$ alkenes which comprising contacting the lower olefin in a primary reactor stage at a temperature of 100° to 350°C and a pressure of 2,000 to 20000 KPa with a medium pore shape-selective siliceous zeolite catalyst having acid cracking activity and a constraint index of 1 to 12; wherein said zeolite has internal pore activity and is treated with a surface deactivating agent having an effective cross section larger than 5 Angstroms to render its surface substantially inactive for acidic reactions; and contacting at least a portion of the primary stage effluent in a secondary reactor stage with an acid catalyst to produce a high viscosity index lubricant stage hydrocarbon having more than 20 carbon atoms.

Compl. specn. 18 pages.

Drgs. 2 sheets

Int. Cl. : D 01 D 5/088.

164497

A METHOD AND APPARATUS FOR SPINNING FILAMENTS.

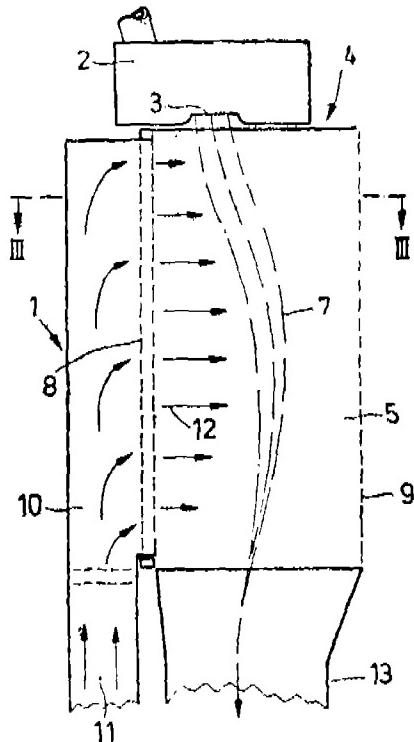
Applicant & Inventor : FRANZ FOURNE, A GERMAN CITIZEN OF INDUSTRIEGBIET, 5305 ALFTER-IM-PERKOVEN, FEDERAL REPUBLIC OF GERMANY.

Application No. 261/Mas/85 filed April 2, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

19 Claims

A method of spinning filaments comprising the steps of : passing the bundle of filaments from the spinneret so

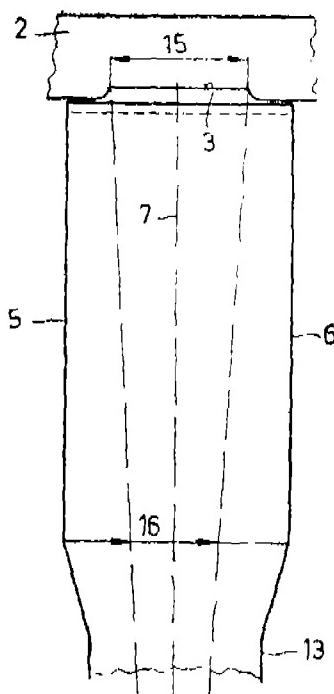


as to extend along a cooling path through the cooling chamber;

supplying a cooling air stream to the cooling chamber and directing the air stream so as to flow in a direction transversely of the cooling path of the filaments substantially parallel to a pair of opposed side walls so as to flow through and around in bundle of filaments;

maintaining a predetermined lateral spacing and;

maintaining the same average lateral spacing between the outermost filaments of the bundles and the adjacent said side walls, said spacing however being not more than 25 mm.



Compl. specn. 23 pages Drgs. 4 sheets

Int. Cl. : F 27 B 14/06.

164498

AN ELECTROTHERMAL SMELTING FURNACES WITH OFF-GAS CHANNEL.

Applicant : ELKEM a/s, A COMPANY INCORPORATED UNDER THE LAWS OF NORWAY, OF MIDDLE-THUNSGATE 27, OSLO 3, NORWAY.

Inventors : (1) TORBJORN AASEN, (2) BIARNE THØGERSEN.

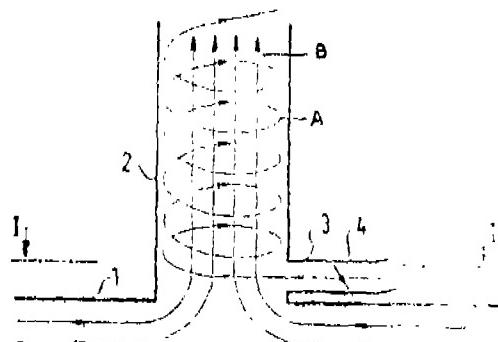
Application No. 264/Mas/85 filed April 4, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

2 Claims

An electrothermal smelting furnace for the production of ferroalloys having an off-gas channel above the furnace roof for the flue gas characterised in that it comprises a pipe

with a valve for blowing additional gas such as air tangentially into the channel to thereby create a spiral flow of the additional gas surrounding the dust-containing off-gas flow in the channel and between the off-gas and the inner wall of the channel.



Compl. specn. 6 pages Drg. 1 sheet

INT. CLASS⁴ : C/07 C 7/04

164499

A PROCESS FOR OBTAINING C₂—C₃ HYDROCARBON TWO STAGE RECTIFICATION.

Applicant : LINDE AKTIENGESELLSCHAFT, a German Company of Abraham Lincoln—Strasse 21, D—6200 Wiesbaden Federal Republic of Germany

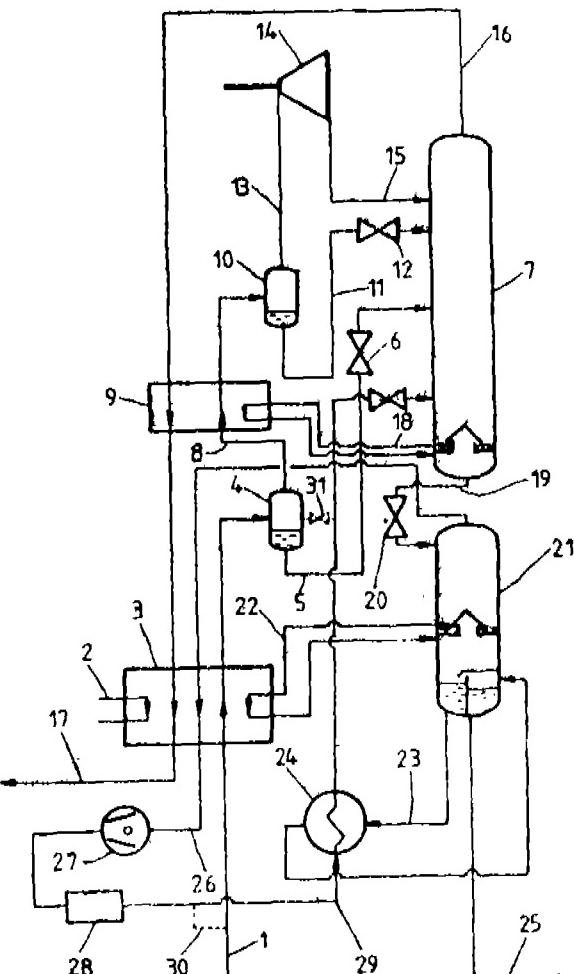
Inventor : PAUL KUMMANN

Application No. : 274/MAS/85 filed on April 10, 1985.

Appropriate office for opposition proceedings (under Rule 4, Patent Rules 1972) The Patent Office, Madras Branch.

8 Claims

A process for obtaining C₂—C₃ hydrocarbons from a hydrocarbon-containing natural gas under pressure, by rectification wherein the natural gas is cooled and expanded and the resultant condensates are introduced into a rectification column wherein the C₂ or C₃ hydrocarbons, respectively, are separated from the lower-boiling components, the improvement which comprises conducting the rectification under two different pressure stages, the fractions produced during cooling and expansion of the natural gas is fed into a first rectifying column operated under a higher pressure, ranging between 20 and 40 bars, to yield an overhead product containing components boiling lower than the C₂ or C₃ hydrocarbons and a bottom fraction enriched in C₂ or C₃ hydrocarbons, the bottom fraction is expanded and then fed into a second rectifying column operating under a lower pressure, or between 8 and 25 bars, then the first column, to yield C₂—C₃ hydrocarbons as bottoms product and an overhead fraction, the latter is compressed and recycled into the first rectifying column.



(Complete Specification—16 pages : Drawing—3 Sheets)

Int. Cl.⁴ : B 65 F 1/00.

164500

SLUDGE AND EXCREMENT CONTAINER.

Applicant : UPONOR AB, OF P.O. BOX 1, S-513 00 FRISTAD, SWEDEN A SWEDISH COMPANY.

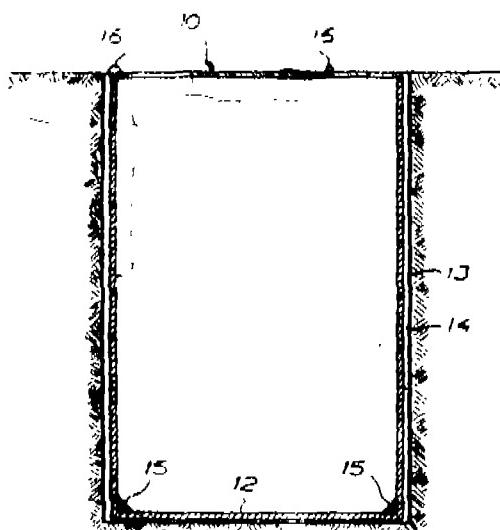
Inventor : PETER NILSSON.

Application No. 343/Mas/85 filed May 7, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras Branch.

5 Claims

Sludge and excrement container to be located in the ground comprising a container with a bottom and perforated peripheral wall and a perforated baffle surrounding the peripheral wall spaced therefrom to form a lining in a ground pit receiving the container, the perforation being circular apertures or elongate slots and the area of the perforation covering 5 to 18% of the surface of the peripheral wall and the baffle respectively.



Compl. specn. 7 pages.

Drg. 1 sheet

REGISTRATION OF DESIGNS

The following design have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Design Act, 1911.

The date shown in the each entry is the date of registration of the design included in the entry.

Class 1. No. 160019. Madhusudan Hiralal Desai, Indian National of 116, Radha Ganj, A.B. Road, Dewas 455 001, State of Madhya Pradesh, India. "Sickle". 5th August, 1988.

Class 1. No. 160093. Sanjeev Kumar Singh, Katra Bajirai, Mirzapur, Uttar Pradesh, India, Indian National. "Ceiling Fan". 6th September, 1988.

Class 1. No. 160183. Shafiqur Rehman (Indian National) trading under the name and style of Kane-N Industries, 6889, Beriwala Bagh Gali Mian sahab Wali, Azad Market, Delhi-110006, India, all residents of Delhi. "Button". 22nd September, 1988.

Class 1. No. 160258. LML Limited, An Indian Company incorporated under the Companies Act, 1956, having Registered Office at C-3, Pankhi Industrial Estate, Kanpur, Uttar Pradesh-208022, India, Indian. "Side Car for two wheeler Scooters". 13th October, 1988.

Class 3. No. 160041. Eagle Flask Industries Private Limited, (an Indian Company) at Eagle Estate, Talegaon 410 507, District-Pune, State of Maharashtra, India. "Casserole". 19th August, 1988.

Class 3. Nos. 160333 & 160334. Modi Rubber Limited, an Indian company of Modinagar, Uttar Pradesh, India. "A Tyre for a Vehicle wheel". 28th October, 1988.

Class 3. No. 160335. The Goodyear Tire & Rubber Company, a corporation organised under the laws of the State of Ohio, with offices at 144 East Market Street, Akron, Ohio 44316-0001, United States of America. a "Tyre for a Vehicle Wheel". 28th October, 1988.

Class 3. No. 1603939. Duralium Corporation (India) a Registered Partnership firm, of G-89 Sarvodayanagar, 1st Panjarapole Lane, Bombay-400 004, Maharashtra, India. "Flask". 31st October, 1988.

Class 3. No. 160340. The Bombay Oil Industries Limited, (an Indian Company) at Kanmoor House, 281-87 Nursi Natha Street, Bombay-400 009, State of Maharashtra, India. "Container". 31st October, 1988.

Class 10. Nos. 160262 & 160263. Bata India Limited, 30, Shakespeare Sarani, Calcutta 700 017, West Bengal, India. "Footwear". 14th October, 1988.

Extn. of Copyright for the Second period of five years.

Nos. 153662, 153737, 153741, 153740, 153743, 153745, 153884, 153742, 153744. Class-3.

R. A. ACILAYA,
Controller General of Patents,
Designs and Trade Marks